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SAN FRANCISCO CITY PLANNING COMMISSION

ENVIRONMENTAL IMPACT REPORT

# PAN-MED
# MEDICAL OFFICE BUILDING

DRAFT
EE 78-325

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# CHAPTER I

# SUMMARY

## A. PROJECT DESCRIPTION

A Medical Office Building (MOB) is proposed for construction at the intersection of Webster and Sacramento Streets on an 0.8 acre lot vacated by the demolition of the Cooper and Lane Buildings of the Pacific Medical Center (PMC) campus, formerly a medical school campus. This lot is owned by and is part of the PMC campus. The MOB would be constructed pursuant to an institutional master plan which has been formulated by PMC. The project sponsor Pan-Med Ltd., a corporation whose shareholders are medical doctors affiliated with PMC, has been formed to rent the site from PMC, and to construct and operate the MOB.

The proposed 5-story structure would have a gross floor area of 127,000 square feet. Approximately 50 office suites for a total of approximately 125 doctors and 174 employees would be provided by the proposed project. Parking for 288 vehicles would be provided by a 2 1/2 level underground parking structure located directly beneath the MOB. The MOB would be connected to the adjacent Stanford building by an above ground pedestrian walkway. Construction of the project is estimated to require 2 years.

## B. PROJECT SETTING

The proposed project site is immediately surrounded on all 4 sides by PMC facilities, including the Annex and Research Institute to the north, the Stanford Building to the east, the Health Sciences Library to the south, and the School of Dentistry and the PMC parking garage to the west. To the north, east, and south of the PMC campus are medium to high density single and multi-family residential land uses. Approximately 0.1 miles west from the center of the PMC campus is the commercial strip of Fillmore Street. Lafayette Park is located 1 1/2 blocks to the east of the site on Sacramento Street and Alta Plaza Park is 2 blocks northwest of the project site on Clay Street.

## C. IMPACTS OF THE PROPOSED PROJECT

Implementation of the proposed project would result in impacts which would occur during the construction period. Specifically, traffic congestion and scarcity of on-street parking would be increased, noise emissions associated with the operation of construction equipment would be generated, and equipment operations would create vehicle exhaust fumes, dust, and suspended particulates.

The completed MOB would reduce a portion of the view to the west down Clay Street, as seen from the Burns Memorial Court and would alter the visual presence of the PMC Campus with respect to the surrounding neighborhood. There would be a 29% increase in 2 way daily vehicle traffic on Webster Street, between Clay and California Streets, but with one exception, all existing service levels of the 14 intersections in the project area would be maintained. The exception being the California and Fillmore Street intersection which would change from a C to a D service level.[1]

It is estimated that the MOB would generate a maximum daily parking demand of 335 spaces, while the number of spaces provided in the MOB underground parking structure would be 288. There would be an estimated parking space deficit of 47 spaces (335 - 288 = 47). Two existing, on-street parking spaces would be removed to provide access to the garage. The estimated parking demand of 335 spaces may be high, however, because 34 of the prospective MOB tenant doctors, plus their employees and patients who drive, already find parking within the PMC campus. PMC management has stated that offices vacated by these doctors would be generally occupied by support personnel already on campus. Following this scenario, which is described in Appendix A at pages 159 through 172, the estimated parking demand would be reduced to 285 spaces, thereby offsetting the above deficit.

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[1] See Appendix A, page 133, for an explanation of traffic service levels.

## D. MITIGATION MEASURES

The project sponsor, Pan-Med, has agreed to small scale design details, projecting window bays, and terracing of the west facade of the MOB to help the structure relate to the victorian residences nearby and provide visual relief. The sponsor has not agreed to additional terracing of the north facade of the MOB to further open up the view from Burns Memorial Court, stating that this would be detrimental to economic feasibility and architectural integrity and that the previous building on the site blocked more view than the proposed MOB.

The project sponsor has agreed to remote site parking for MOB construction workers, along with several measures to reduce dust during construction. They have also agreed to submit an acoustical report upon completion of the mechanical systems plans. During the construction period, Pan-Med has agreed to designate an individual to respond to noise compliants and to insure that other noise control measures to which it has agreed are followed. The project sponsor has also agreed to locate garage exhaust vents north and south of the building where emissions would be safely dispersed by prevailing winds.

PMC has agreed that office space vacated by 38 doctors, which presently have offices at PMC and who will be moving into the MOB, would not be completely reoccupied by new physicians. Assuming that these 38 transfer physicians, plus their employees and patients, would continue to park where they are now parking within the PMC campus, parking demand would be reduced by an estimated 50 spaces. Pan-Med has not agreed to a redistribution of the composition of MOB physician specialties, stating that this would not allow the MOB to provide the mix of physician specialties which is desired by Pan-Med and which is in the long-term interest of PMC. Pan-Med is considering adjusting scheduling of physicians hours to reduce impacts on peak period transportation loads.

Several energy conserving design features and technologies have been incorporated into the MOB including window shading, variable volume ventilation, reclaiming heat from the light system, and hot water conservation.

In response to community concerns, the project sponsor has agreed to place trash receptacles around the MOB, provide security patrols at the construction site, provide low-level lighting in all landscaping, help seek the installation of stop signs and pedestrian warning lights, and to make the MOB lunchroom and plaza available to people escorting MOB patients.

## E. ALTERNATIVES

Several alternatives to the proposed project are discussed in this report:

1. No-project.
2. Postponement of the project.
3. Alternative use of the site, including development of the site as a park or development as multi-family housing.
4. Alternative design of the project, including medical office buildings of lesser (65,000 and 113,000 square feet) or greater (165,000 square feet) size than that which is proposed.
5. Alternative location of the site.

# CHAPTER II

# PROJECT DESCRIPTION

## A. MEDICAL OFFICE BUILDING (MOB) PLANNING CONTEXT

### 1. Goals and Objectives for the Project Site

The immediate priority of Pacific Medical Center (PMC), as stated in its 1976 Institutional Master Plan (PMC Plan) is to construct or encourage the construction of an ambulatory care center (AC) at the proposed project site. The PMC Plan provides that the AC would accommodate doctor's offices and clinic functions, and would be physically linked to Presbyterian Hospital. However, the 1978 status report on the Plan[1], citing the costs of new clinic construction, states the the project site will be used only for medical offices and will not be built with PMC funds. Clinic services will remain in the existing Annex and Stanford buildings. In March 1978, Pan-Med Ltd., a California Corporation, was formed. Pan-Med is comprised solely of physicians who desire to have their offices on the PMC campus. Pan-Med is affiliated with PMC in that all Pan-Med's shareholders are on the medical staff of PMC. PMC is leasing the land to Pan-Med who will own, develop, and occupy the building. Membership in Pan-Med Ltd., determined by criteria set forth by the Board of Directors of Pan-Med Ltd. requires that members be actively interested in patient and physician education and have a reputation for excellence in patient care.

The Board of Trustees of Pacific Medical Center has the right to approve the tenants of the building based upon appropriated specialty mix, quality of care, and membership of Pacific Medical Center's medical staff. Such rights of approval are typical of Medical Office Building projects that develop pursuant to a ground lease from a hospital to a private developer such as Pan-Med Ltd.

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[1] Pacific Medical Center, "1978 Status Report for the Pacific Medical Center Master Plan, 1977-87". p. 2.

In March 1979,[1] PMC amplified their objectives for the project site and the project as follows:

- The building shall house that appropriate mix of primary care and specialty physicians which will meet the needs (a) of patients at a uniform quality of care, (b) of both patients and physicians for cost and time conservation, and (c) of the hospital for containing health costs through maximum efficient utilization of existing resources and services.

Pan-Med has similar objectives for the project site, they are listed below.

- To provide physician office space which is contiguous both to Presbyterian Hospital for improved utilization of the hospital and its diagnostic tools and services; and to other physicians, to allow for door-to-door consultation.

- To provide patient education services in dietetics, hypertension, diabetes, and other areas of preventive medicine through a health education program sponsored by Pan-Med.

- To provide a preceptorship program for the out-patient medical education of junior physicians.

- To set up a Patient Access Office to provide free information on social service benefits, service organizations, health insurance programs, and language interpretation to reduce language barriers.

- To provide a profitable return on investment.

## 2. Opportunities for Neighborhood Participation in MOB Planning.

PMC maintains frequent contact with several neighborhood organizations to discuss citizen concerns about the existing and planned expansion of PMC facilities. For example, the 1978 Status Report[2] on the PMC Plan states that the current design for the MOB, with a lower profile than originally conceived in the 1977 PMC Plan, is the developer's response to the citizens' concerns.

---

[1] Memo from PMC to Sedway/Cooke, March 1979.

[2] Pacific Medical Center, "1978 Status Report." p.2.

Specific to the proposed MOB and the preparation of this EIR, a citizen's advisory committee was formed to invite the participation of individuals and representatives from the Pacific Heights Neighborhood Association, the Pacific Heights Neighborhood Council, the Fillmore Street Merchant's Association, Japantown, the Auxiliary and Volunteer Services Organization of PMC, the University of the Pacific and the Congregation Sherith Isreal.

Two meetings were held to initially identify citizen concerns about the MOB to discuss impacts and to suggest mitigation measures. Participants at the meetings included the citizen's advisory committee, representatives from the EIR consulting firm, PMC, Pan-Med, and Kaplan/McLaughlin/Diaz, the MOB architects. The results of these meetings have been incorporated into the EIR, as appropriate, and are listed in their entirety in Appendix F, page 222, Community Concerns.

## B. PAN-MED MEDICAL OFFICE BUILDING DESCRIPTION

### 1. Type of Project

The proposed project is a medical office building (MOB) which would provide for doctor's office space, ancillary uses and storage. An above ground pedestrian walkway between the Stanford Building and the MOB 5th floor hallway and elevator lobby would provide access between the two buildings. (See Figure 6, page 16) Approximately 50 office suites for a total of approximately 125 doctors would be provided by the proposed project. An estimated 38 of these doctors or 13 office suites are presently at PMC in the Stanford Building and Annex.[1] Staff both for the tenant doctors and MOB operations, would be approximately 174 persons.[1] The MOB would operate on an approximately 9:00 a.m. and 5:00 p.m. shift with normal office hours on weekdays only. Its meeting room facilities may be made available to neighborhood residents during nonoperational hours subject to conditions mutually agreed upon by the Pan-Med Board of Directors and the residents.

---

[1] Dr. Robert Webster, Vice-President Pan-Med, Ltd, written communication, 18 December 1978 and 2 February 1979.

### 2. Project Location

The proposed project would be on the campus of PMC which is in the City and County of San Francisco, California, in the Pacific Heights Neighborhood of the Marina Planning Area. Figure 1 shows the location of PMC. Occupying a portion of Lot 1 of Assessor's Block 628 as shown in Figure 2, page 10, the project site, approximately 225' by 130' (0.74 acre), is centrally located in Census Tract 135.

Presently the site is vacant except for remnants of the former Cooper Medical College, Lane Hall and Lane Hospital, all of which were demolished in 1974. Remaining are a deteriorating red brick and wrought iron fence built in the 1890's along the sidewalk on the northern, southern and portions of the western boundaries of the site, and sections of the buildings' walls. The site is covered by approximately 50% ice plant and native vegetation. However, it still retains the appearance of a demolished building foundation. Surface elevations[2] range between approximately 220' and 242', sloping generally from the northeast to the southwest. The site is topographically characterized by 2 generally level areas at each of the above mentioned elevations, with a slope separating them.

### 3. Applicable Zoning Regulations

The site is subject to the regulations of the RM-2 zoning district, a mixed residential moderate density district, as shown in Figure 9, page 27. Medical offices are permitted by Conditional Use Permit in the RM-2 district when part of a hospital

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[1] Based on the results of the MOB User Questionnaire (see Figure A-3, page 137), it was determined that the average size of an individual physician's support staff is 1.3 persons. The MOB would accommodate 125 doctors (1.3 x 125 = 163). Eleven additional persons would be employed to staff laboratory, pharmacy, and x-ray functions.

[2] All elevations refer to City datum, i.e. 8'6" above mean sea level.

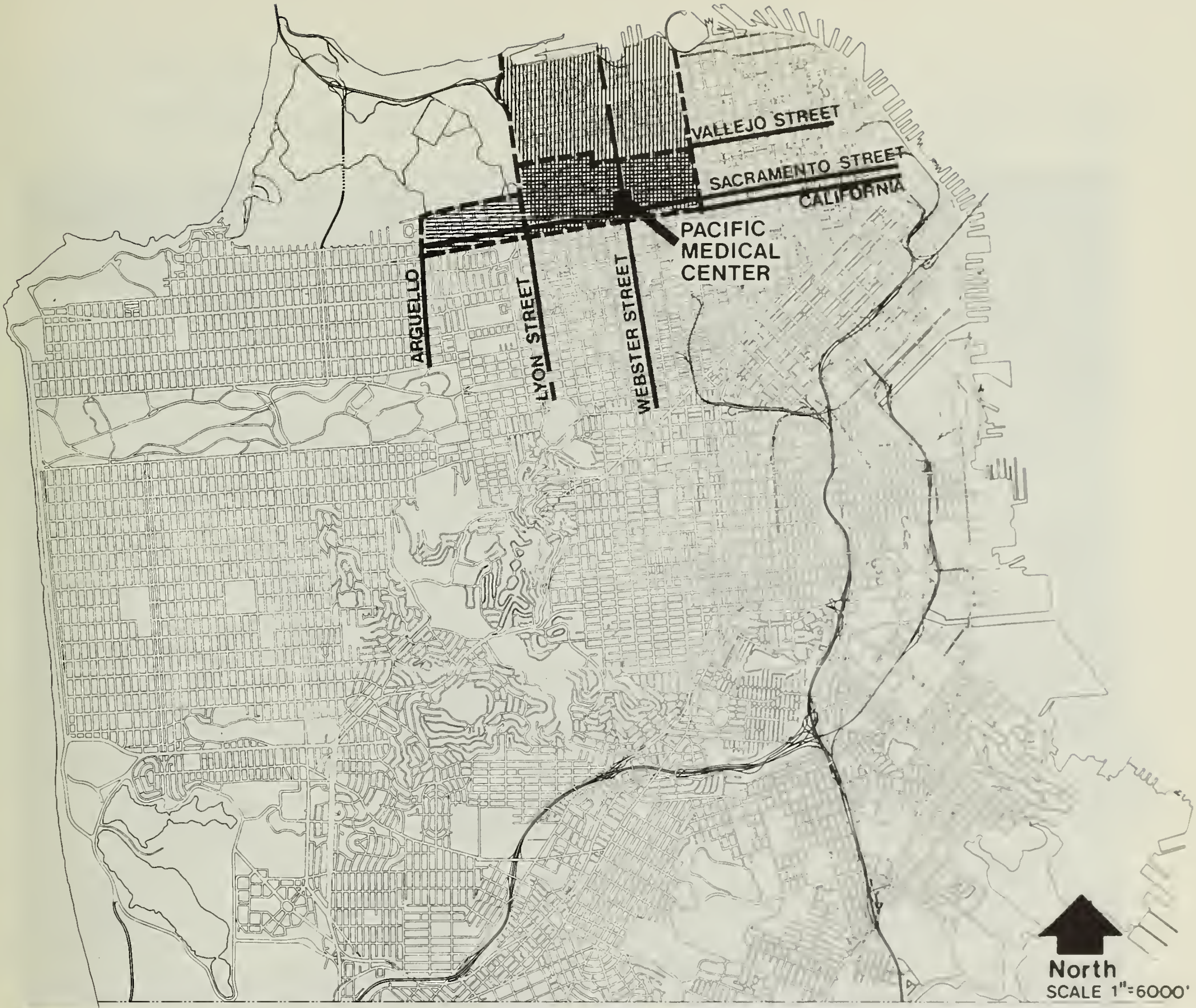

**Figure 1 SITE LOCATION MAP**

▥ MARINA PLANNING AREA

▤ PACIFIC HEIGHTS NEIGHBORHOOD

Source: San Francisco Department of City Planning

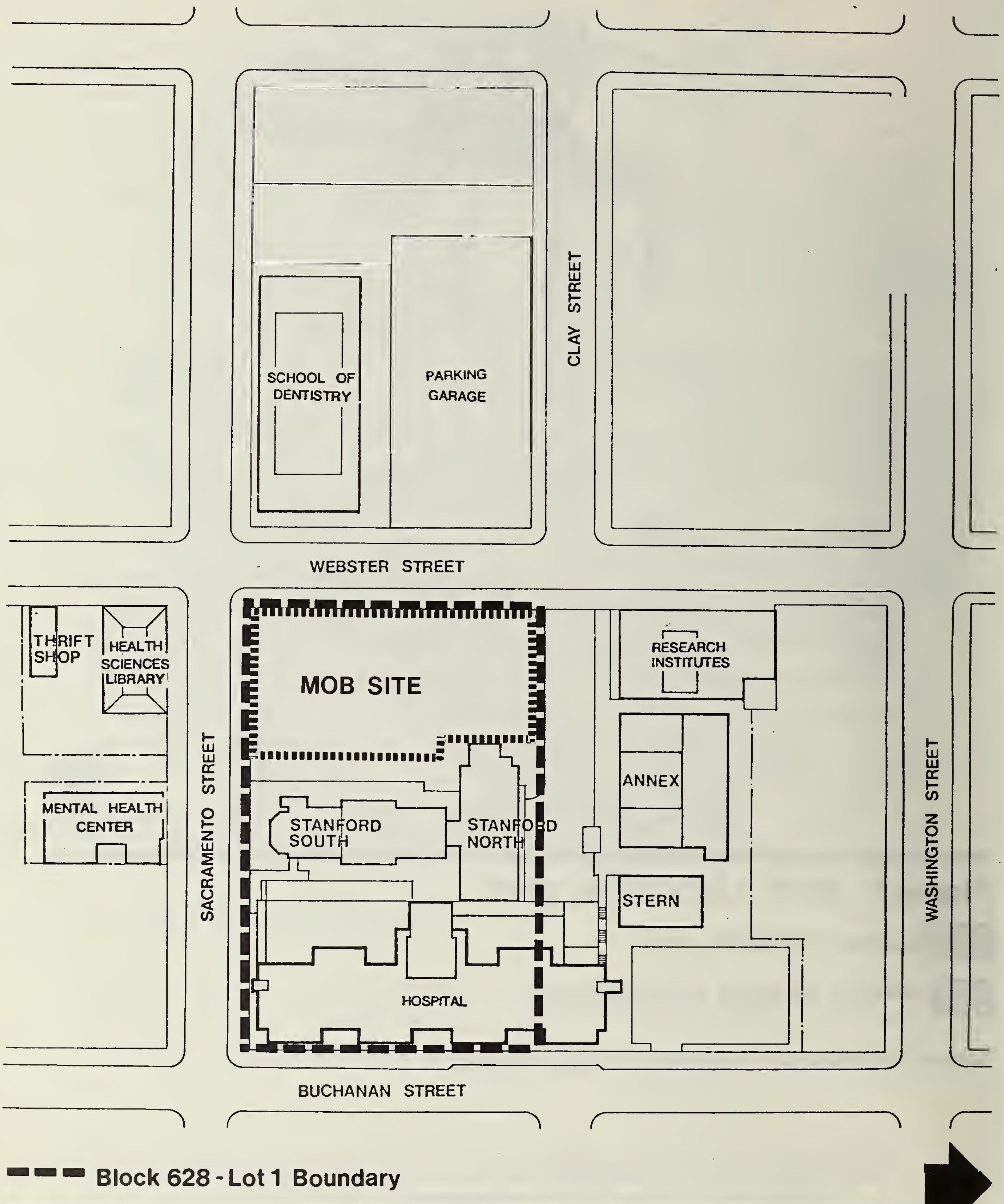

**Figure 2 SITE PLAN-EXISTING FACILITIES 1976**
Source PMC Master Plan 1977-1987

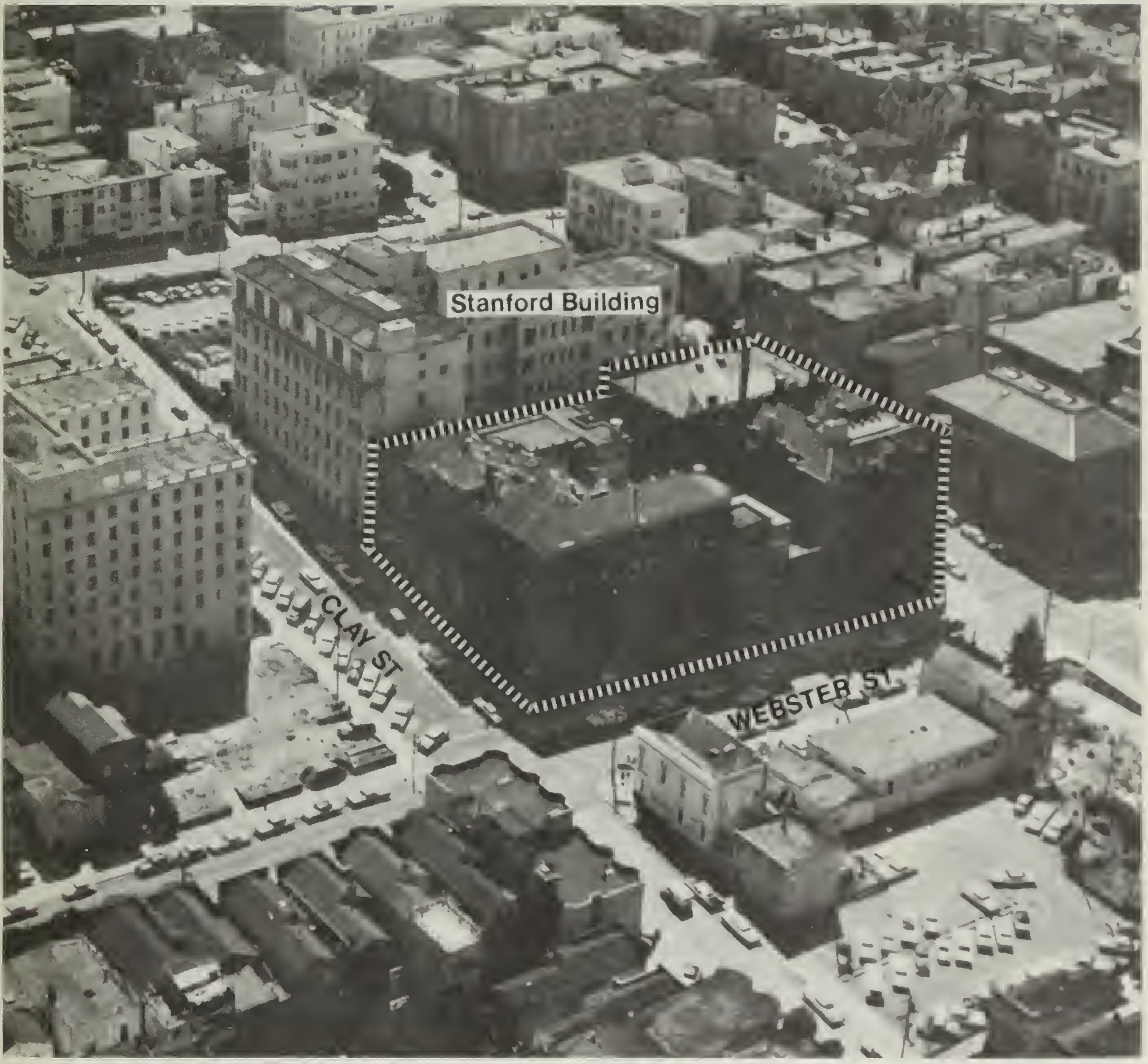

Figure 3 PACIFIC MEDICAL CENTER 1960-Looking Looking Southeast

⬚ PROPOSED MEDICAL OFFICE BUILDING SITE: THE ORIGINAL BUILDINGS SHOWN IN THIS PHOTOGRAPH WERE DEMOLISHED IN 1974.

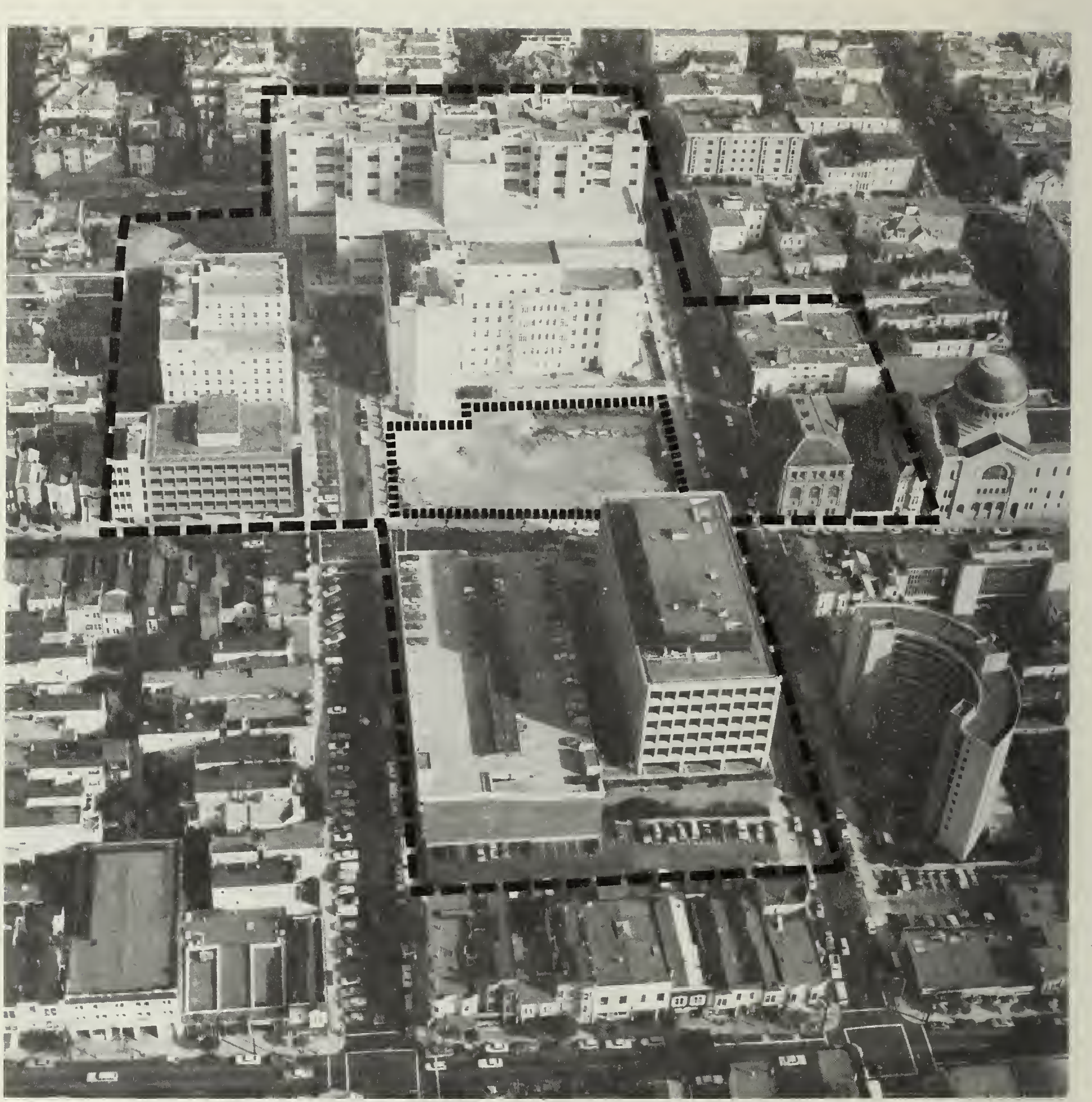

Figure 4 PACIFIC MEDICAL CENTER 1977- Looking East

⬚ PROPOSED MOB SITE

▭ PMC CAMPUS

or medical center complex.. The project site is additionally subject to the regulations of the 160-F Height and Bulk District, also illustrated in Figure 9. The specific requirements of the RM-2 District and the 160-F Height and Bulk District and their application to the proposed MOB are discussed in Chapter III, Environmental Setting, page 21, and Chapter IV, Environmental Impacts, respectively under the heading "Land Use", page 57.

## 4. Project Design

The proposed 5-story MOB would have a gross area of 127,000 sq. ft. for office and storage space and 84,720 sq. ft. for on-site parking. Square footage per floor is listed below.

| Floor | Gross Sq. Ft.* | Rentable Sq. Ft.** |
|---|---|---|
| 1st | 26,640 | 22,620 |
| 2nd | 27,530 | 23.730 |
| 3rd | 27,200 | 24,754 |
| 4th | 23,600 | 21,142 |
| 5th | 22,030 | 19,555 |
| Subtotal | 127,000 | 111,804 |
| Mechanical Penthouse | 4,000 | |
| TOTAL | 131,000 | 111,804 |

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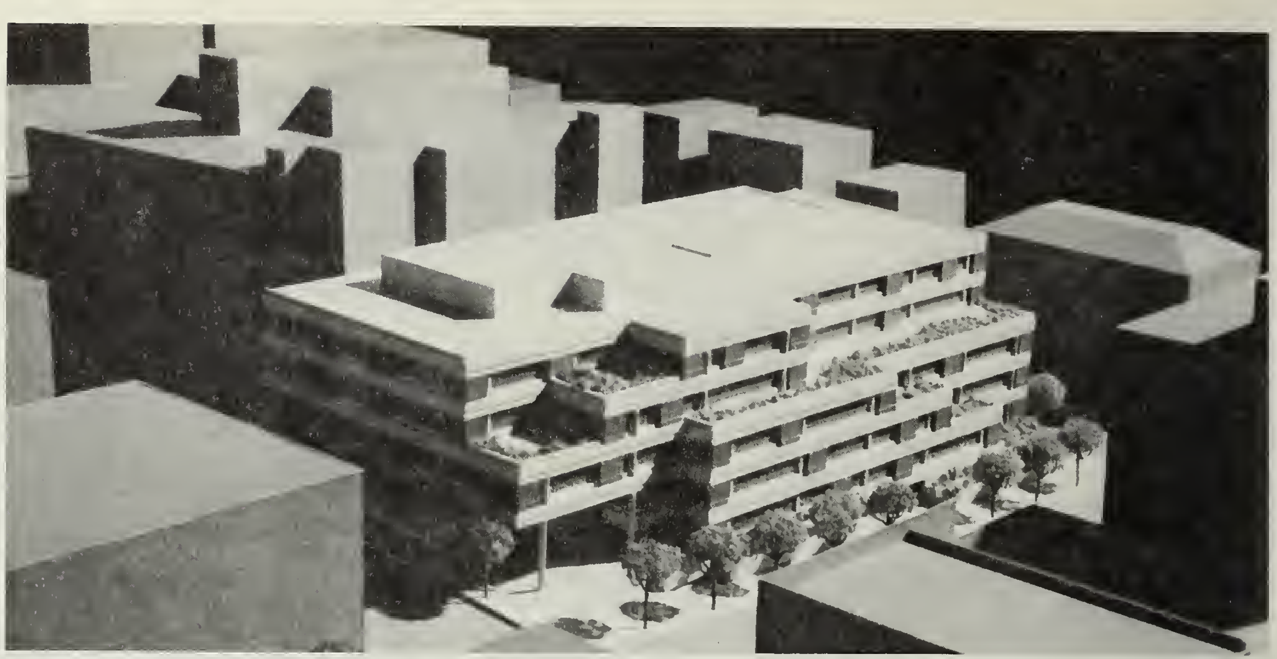
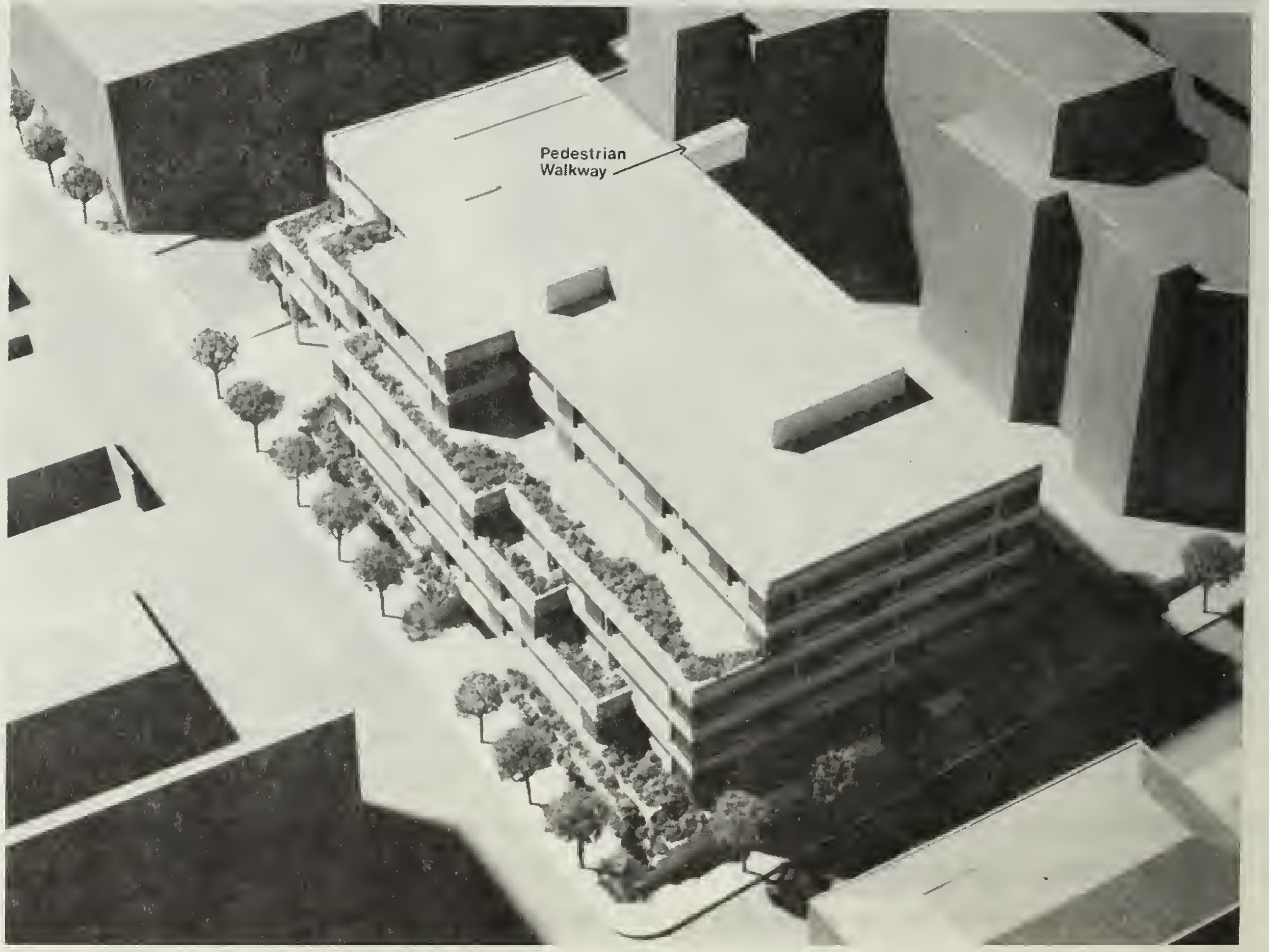
*Gross - Total enclosed area.
**Rentable - Gross less core elements, passageways.

The building would be rectangular in shape with dimensions on the first floor of 224' in length, 122' in width, and 272' diagonally. The 5th floor building diagonal measurement would be 260'. As presently designed, terraces would break the west facade in both horizontal and vertical steps. A vertical step would be formed by the 20' setback of the upper 2 floors from the Webster Street property line to accent the third floor height and the horizontal aspect of the building. Horizontal stepping, used to deemphasize the length of the building, along Webster Street, would be achieved by recessing a portion of each floor from the floor below to form a series of terraced steps along the length of the building. Photographs of an architect's model of the MOB are shown in Figure 5. The exterior finish of the building has not been finally determined, but a buff-colored, concrete based, light



VIEW FROM THE NORTHWEST



VIEW FROM THE SOUTHWEST

Figure 5 PHOTOS OF ARCHITECT'S MOB MODEL

weight precast panel, combined with gray glass and a broad, rust-colored band, is proposed.

Landscaped outdoor areas would include the entryway plaza at the northwest corner of the building and a ground level outdoor plaza on the east side of the building to provide a place for MOB employees to congregate during lunch and off-duty periods. The plaza would also be accessible to MOB patients and visitors. The landscape plan would provide for street tree planting, planters at ground level along the building's sides and front, on-site tree planting and landscaped terraces. The MOB architects state that the street trees would be consistent in scale and type with those existing trees along the residential sections of Webster Street. A site plan for the MOB is presented in Figure 6.

The setbacks for the proposed building would be approximately 5'0" on the north and south, 20' on the east (measured from a point south of the existing stair tower) and 6', 17', and 38' on Webster Street depending on point of measurement along the facade.

The 5 floors of office space would range in height from 63' at Clay Street to 77' at Sacramento. The mechanical penthouse would be 8' above the rest of the roof. There are 2 parking levels proposed with all except a portion of the top level located subsurface. The bottom level of the parking structure would range from 36' to 42' below ground level. Because much of the site is recessed below street level, the number of levels of the proposed project above grade would range from 6 stories at Webster and Sacramento Streets to 4 stories at the northeast side of Clay Street.

The first floor of the proposed project would provide medical office space, a pharmacy, x-ray, laboratory, meeting and conference rooms, lunch room and social service room. The bulk of the medical office space would be provided on floors 2 to 5. Heating and cooling equipment would be in the penthouse. Plans of the first and fourth floors are in Figure 7, page 17.

Primary access to the building would be on Webster Street. Pedestrian access would be provided at the corner of Webster and Clay Streets. Vehicular ingress and egress at parking level 1 would be on Webster Street near Sacramento. Wheel

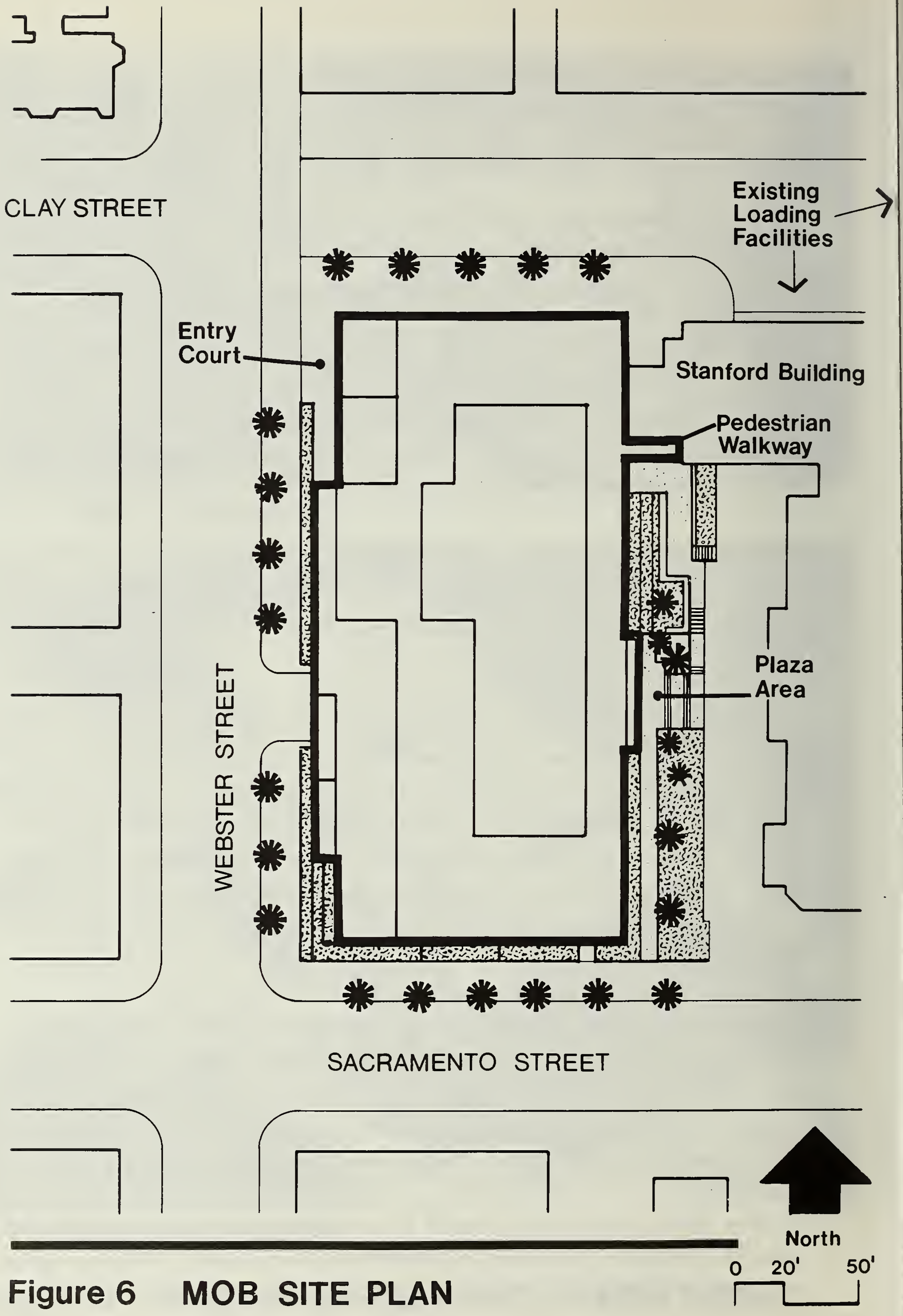
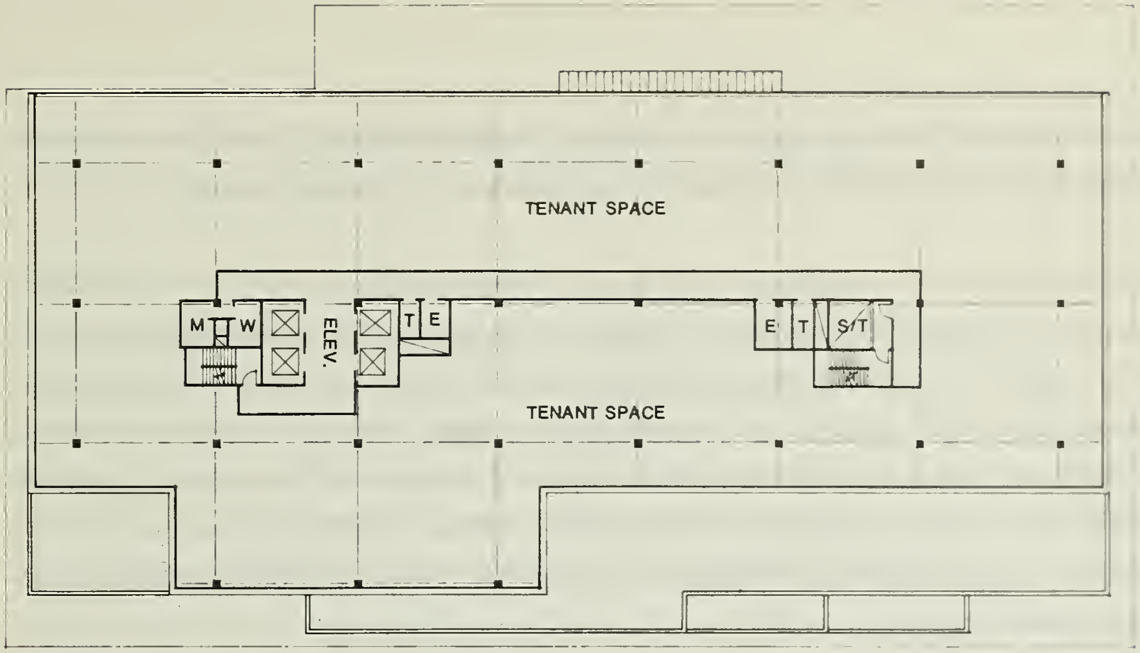
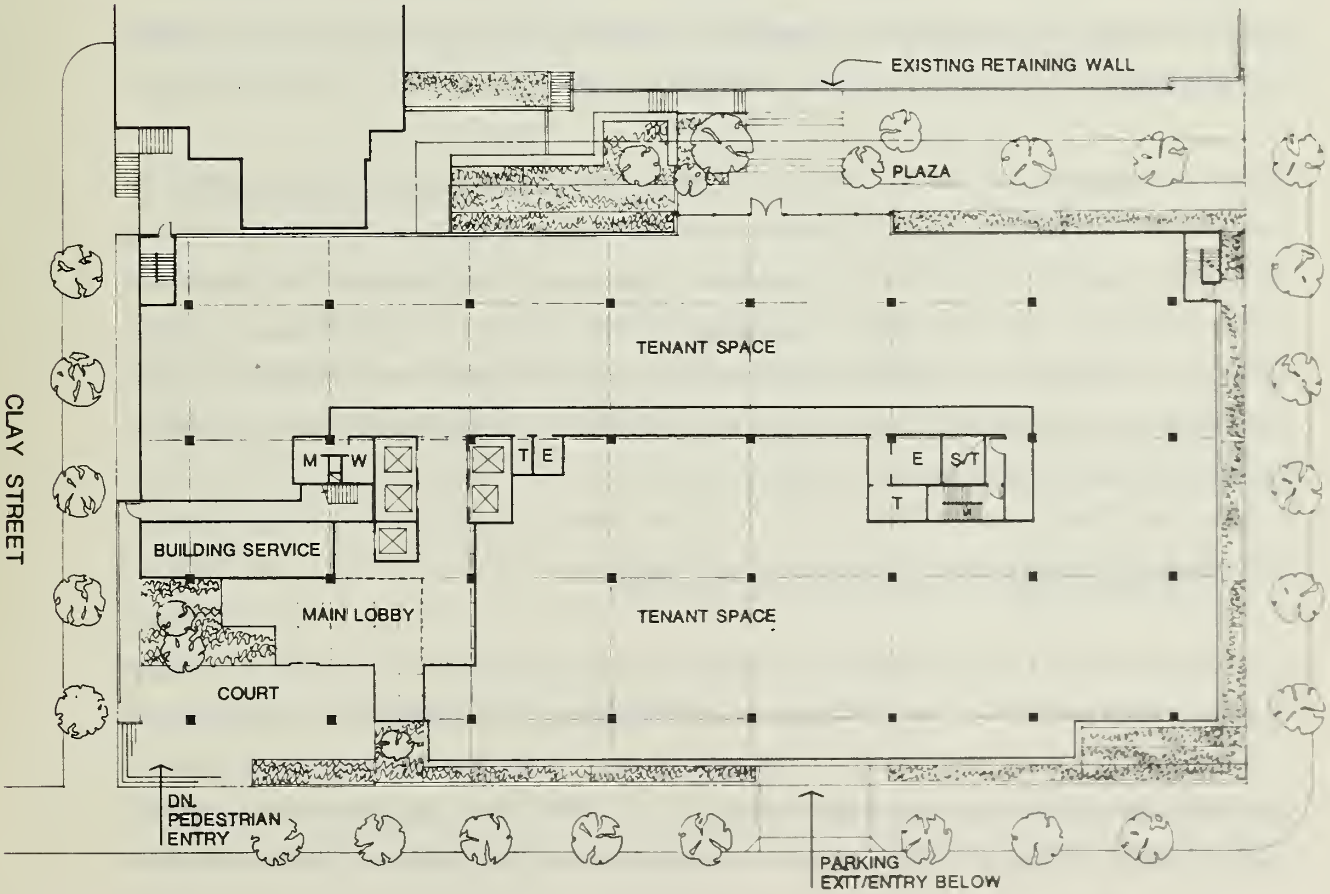


Figure 6 MOB SITE PLAN



FOURTH FLOOR



FIRST FLOOR
EL. 234.5

Figure 7 MOB FLOOR PLANS

chair access to the building is provided at the southern end of the court entrance on Webster Street and also through the elevators in the parking garage.

The MOB would be served by a 2-1/2 level underground parking structure providing a total of 288 spaces. Employee and patient parking would be tandem[1] and would be served by attendants. Doctor parking would be self service. Employees and doctors would be charged a monthly fee to park. Patient parking would be partially validated so that the rates charged to patients will be competitive with the market. Rates charged to those parking without MOB validation would be in excess of the market rate in order to discourage the use of MOB parking by non-MOB related persons.

There would be no loading facilities in the MOB. The MOB would share the existing loading facilities at the Stanford Building shown in Figure 6, page 16.

Low-level lighting would be provided in the landscaping surrounding the MOB and in the plaza on the east side of the building.

Windows designed to reduce solar heat gains during the summer, yet provide for passive space heating during winter months are proposed for inclusion in the project as energy conservation measures. The use of active solar for space and water heating is not presently proposed, but the design of the MOB would facilitate the installation of these systems when they become cost effective. The stairwells are designed for emergency use only; travel between the floors would be limited to the mechanized elevators.

### 6. Project Construction, Scheduling and Costs

The MOB would be of concrete construction for the parking section and steel frame construction for the 5 floors and penthouse. The structure would require excavation, encompassing most of the site surface area, for the parking garage. It is anticipated that the columns needed for the steel frame construction would be supported by drilled concrete caissons going down to the bedrock. There would be

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[1] Tandem parking is when cars are parked one behind the other, requiring an attendent to move the front car in order to remove the car in the rear.

3 phases of construction; excavation, construction of the parking garage, and construction of the structural frame. It is estimated that construction would require 2 years.

The sequence and major equipment needs for MOB construction would be as follows: a drilling rig, soldier braces and jack hammers (1 - 1/2 months); cat loaders for excavation and grading and a specialized drill for angle anchors (2 - 3 months); crane and bucket to finish excavation and remove dirt ramp (1 - 2 weeks); concrete trucks and crane for steel placement for the concrete garage; and climbing crane for steel erection of office building structure (5 - 6 months). Steel decking would be placed during steel frame construction. The basic building systems and slab pours would follow, requiring concrete trucks. The building would be progressively closed in and fitted out.

Construction would be limited to weekdays between the hours of 8 a.m. to 4:30 p.m. There would be an average of 89 construction employees per day.[1] The estimated cost of construction of the proposed project would be $11 - 12 million.

## 7. Approvals Required

### a. Conditional Use Permit

The site of the proposed MOB is in a RM-2 zoning district which permits medical offices, other than an office accessory to a physician's residence only as a Conditional Use pursuant to an advertised public hearing by the City Planning Commission. The conditions under which the Commission may grant the required Conditional Use Permit are described in Chapter III - Environmental Setting at page 26.

### b. Planned Unit Development (PUD) Permit

The site of the proposed MOB is additionally subject to regulations of the RM-2 District which establish a floor area ratio of 1.8 to 1 for the project site and the

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[1] Paul Barnhart, Kaplan/McLaughlin/Diaz, telephone conversation, 13 March 1977.

PMC Campus. This ratio would limit the total floor area of the MOB to 1.8 times the area of the MOB site. The proposed MOB would exceed this limit, therefore it would require approval as a Planned Unit Development (PUD) by the City Planning Commission. Since the PMC campus as a whole has already reached the PUD FAR limit, there is no room for the now proposed Medical Office Building under the PUD system. However the Medical Office Building would qualify under Section 304 of the City Planning Code which allows the City Planning Commission to consider buildings with greater floor area ratios than otherwise permitted. A PUD permit is a type of Conditional Use permit and therefore the same criteria for granting approval apply. Applications for a Conditional Use permit and a PUD permit may be combined and heard jointly by the Planning Commission at the same public hearing.

### c. Certificate of Need

The Certificate of Need process is derived from Federal legislation (Public Law 93-641 and Public Law 96-79) which requires that each state enact a law regulating defined capital projects undertaken by health facilities such as addition of beds, major new services and major capital expenditures related to health care. California has enacted such a law (Chapter 864, 1976 statutes). This law requires hospitals to file an application and go through a public hearing process involving the local Health Systems Agency and the Office of Statewide Health Planning and Development before obtaining a Certificate of Need.

Pan-Med Ltd. is in the process of applying for a Certificate of Need from the Office of Statewide Health Planning and the West Bay Health Systems Agency. The San Francisco Zoning Administrator has stated that in order for Pan-Med's Conditional Use Application to be complete it must be accompanied by a Certificate of Need, a Certificate of Exemption, or a letter from the appropriate state agency stating that the certificate is not required.[1]

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[1] Robert W. Passmore, Acting Zoning Administrator, Department of City Planning, written communication, 2 October 1979.

# CHAPTER III

# ENVIRONMENTAL SETTING

## A. LAND USE

The study area in the following analysis is a 20 block, 76 acre area (excluding public right-of-ways) bounded by Jackson, Laguna, Pine and Steiner Streets, see Figure 8. References to Lafayette Park and Alta Plaza Park, which border this area on the east and west, respectively, are also included where appropriate.

### 1. Land Ownership

The majority of the land in the study area is privately owned. The Pacific Medical Center owns and occupies approximately 6 acres (including the 0.8 acre project site), encompassing 1 entire city block and portions of 3 other blocks. Three parcels are publicly owned, including a fire station on California Street and 2 public parks, Lafayette and Alta Plaza.

### 2. Existing Land Use

The overall land use pattern within the study area is described by a mixture of institutional, residential, commercial, light industrial and public uses, as illustrated in Figure 8. Residential and medical institution are the predominant land uses. The area is developed, except for 4 vacant lots interspersed throughout the study area.

The medical institution character of the study area was established in 1882 with the construction of the Cooper Medical College, followed by the continued expansion of facilities. The site of the proposed MOB was occupied by institutional medical land uses from 1882 until 1974, when the Cooper Medical College and 2 other medical buildings were demolished.

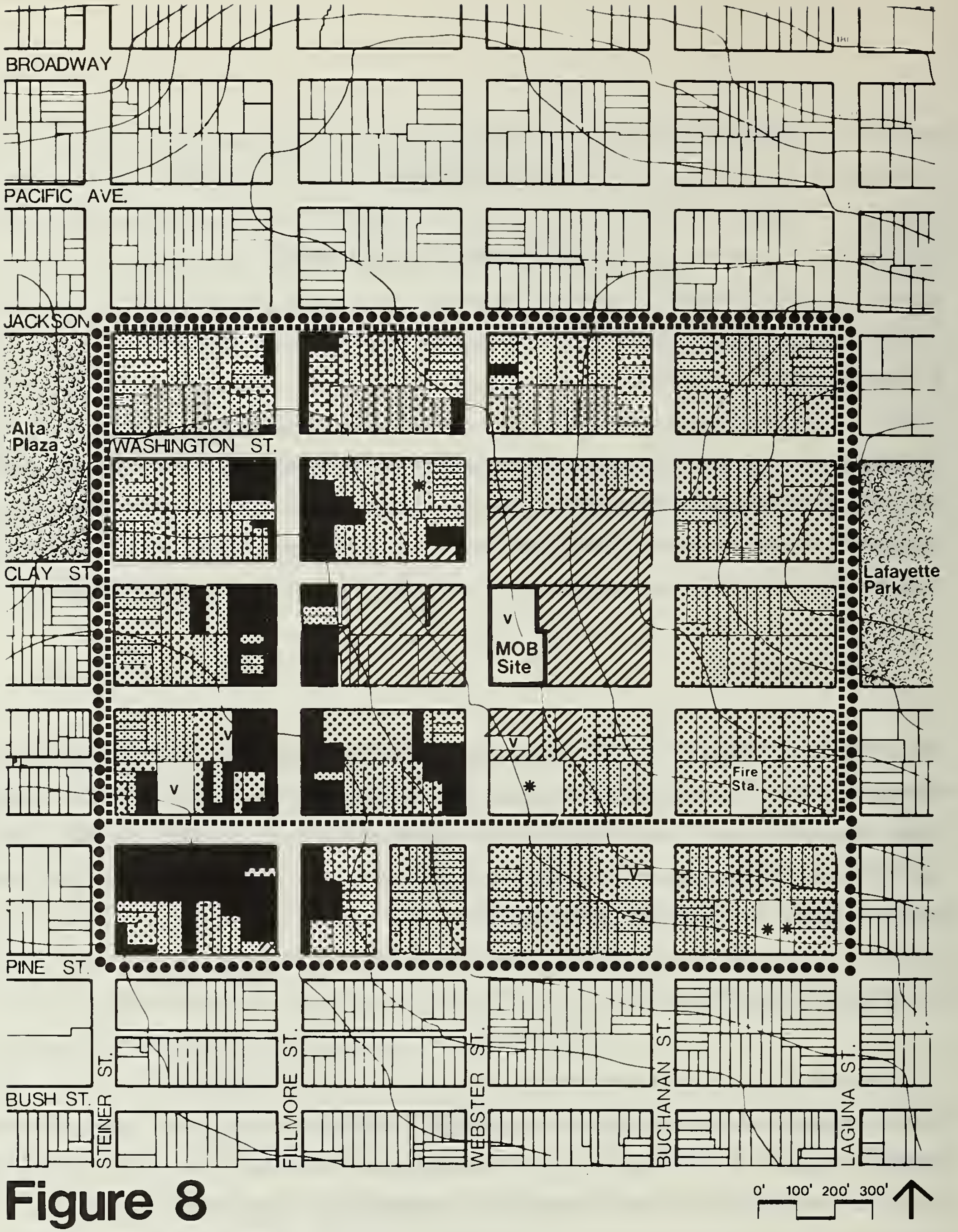

**Figure 8**
**LAND USE 1978**

░ **Residential: Single Family & 2-3 Units**

▒ **Residential: 5+ Units**

■ **Commercial: Office or Retail**

▤ **Light Industrial**

⋰ **Census Tract 135**

▨ **PMC**

* **Church**

v **Vacant**

●●● **Study Area**

SOURCE: SANBORN MAPS,
VOLUME 3, SAN FRANCISCO, CA.
REVISED MAY 1979

The residential character of the study area is defined, in terms of area, by an approximately equal split between low density and multiple family uses. In total, approximately 25 of the 76 acres of land within the study area are devoted to residential uses.

Four churches, some light industrial uses and a fire station are located in the study area. Lafayette Park and Alta Plaza Park are on the periphery of the area.

There are mixed commercial-residential structures in the study area, mainly concentrated west of the project site, along Fillmore Street, and less intensively concentrated along California and Sacramento Streets west of the Fillmore Street intersection. In most mixed use structures the commercial uses usually occupy the first floor. Several retail commercial structures on Fillmore Street have been converted to medical office uses.

There are scattered medical offices located throughout the residential regions of the study area. Their density increases with proximity to the PMC campus. In most cases these medical offices occupy converted residences. For example, 3 of the residential structures on Webster Street between Clay and Washington Streets have been converted to provide for medical office space in part or all of the building.

### 3. Land Use Regulations

Planned Unit Development (PUD)

The PUD granted to PMC by the 1971 City Planning Commision Resolution No. 6759 authorizes PMC to "construct new buildings and develop medical service functions" in accordance with a master plan prepared by PMC in 1971, subject to certain limitations. This 1971 master plan should not be confused with the PMC Plan, which is discussed below. The authorization given by the City Planning Commission in 1971 does not include the location of a Medical Office Building as now proposed. A modification of said authorization must be approved under applicable provisions of the Planning Code to allow construction of this project.

## PMC Institutional Master Plan (PMC Plan)

Section 304.5 of the San Francisco City Planning Code, added in 1976, requires an institution, defined by the Code as a post-secondary educational institution or a medical institution, to have a current institutional master plan on file with the Department of City Planning. This plan must describe the existing and anticipated future development of that institution. An initial institutional master plan was required to have been filed no later than 31 December 1976, and subsequently, at 2 year intervals, each institution must file a report with the Department describing the current status of the plan. Additionally, any substantial revisions to the plan on file must be submitted to the Department as soon as such revisions are developed by the Institution.

The initial submission of an institutional master plan and all subsequent revisions require public hearings held by the City Planning Commission. As provided by Section 304.5, these hearings are only for the receipt of public testimony and do not constitute Commission approval or disapproval of any plan or revision. One of the stated purposes of this section is to enable the institution to make modifications to its master plan in response to comments made in public hearings, prior to more detailed planning and prior to any request for authorization from the City to proceed with new development proposed in the plan.

Institutional master plans and revisions submitted by medical institutions are additionally submitted by the Planning Department to the West Bay Health Systems Agency for review and comment.

Pacific Medical Center submitted its Institutional Master Plan 1977-1987 (hereinafter PMC Plan), to the City Planning Department in December 1976. The PMC Plan grew out of the earlier 1971 plan described above. The PMC Plan has as its first priority the construction of an 8-story, 165,000 gross square feet ambulatory care center (AC) on the proposed MOB site. As described in the PMC Plan, the AC would accommodate doctors' offices and clinic functions, including out-patient rehabilitation. Although the PMC Plan is silent on this point, it is estimated by Oren Reinbolt, Director of Plant and Systems, that the AC would provide office space for 160-165 doctors.[1] The AC would be linked to the existing Stanford Building via an above ground pedestrian walkway.

The PMC Plan was heard at a Planning Commission hearing on 20 May 1977. At the hearing, the following comments relevant to the AC were received. Commissioner Ina Dearman remarked that the AC should be referred to as a medical office building. A representative of the Pacific Heights Neighborhood Council expressed strong objections to the proposed form, height, and bulk of the AC and suggested that it should be scaled down. A representative of the California Consumer Health Coalition stated that the proposed AC would not be necessary if a creative approach were taken to sharing facilities with other medical institutions. Commission President Gordon Lau concluded the hearing by advising PMC that the Commission would not be very receptive to a Conditional Use Permit application (this requirement is discussed below) based on the expansion proposed in the PMC Plan as submitted.

There have been no subsequent revisions of the PMC Plan. The first required 2-year status report was submitted by PMC in December 1978. Citing the costs of compliance with codes governing clinic construction, the report notes that the AC proposed in the PMC Plan would be used exclusively for medical offices. The report also related that Pan-Med, Ltd., a corporation of private practice physicians, was formed in 1977 to undertake development of a medical office building on the site designated in the PMC Plan for the construction of the AC. This site would be leased to the corporation for this purpose by PMC. Robert W. Passmore, Zoning Administrator of San Francisco, has stated that the distinction between an AC and MOB is not sufficient to require a public hearing on the 1978 status report.[1]

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[1] Oren Reinbolt, Director of Plant and Systems, telephone conversation of 26 April 1979.

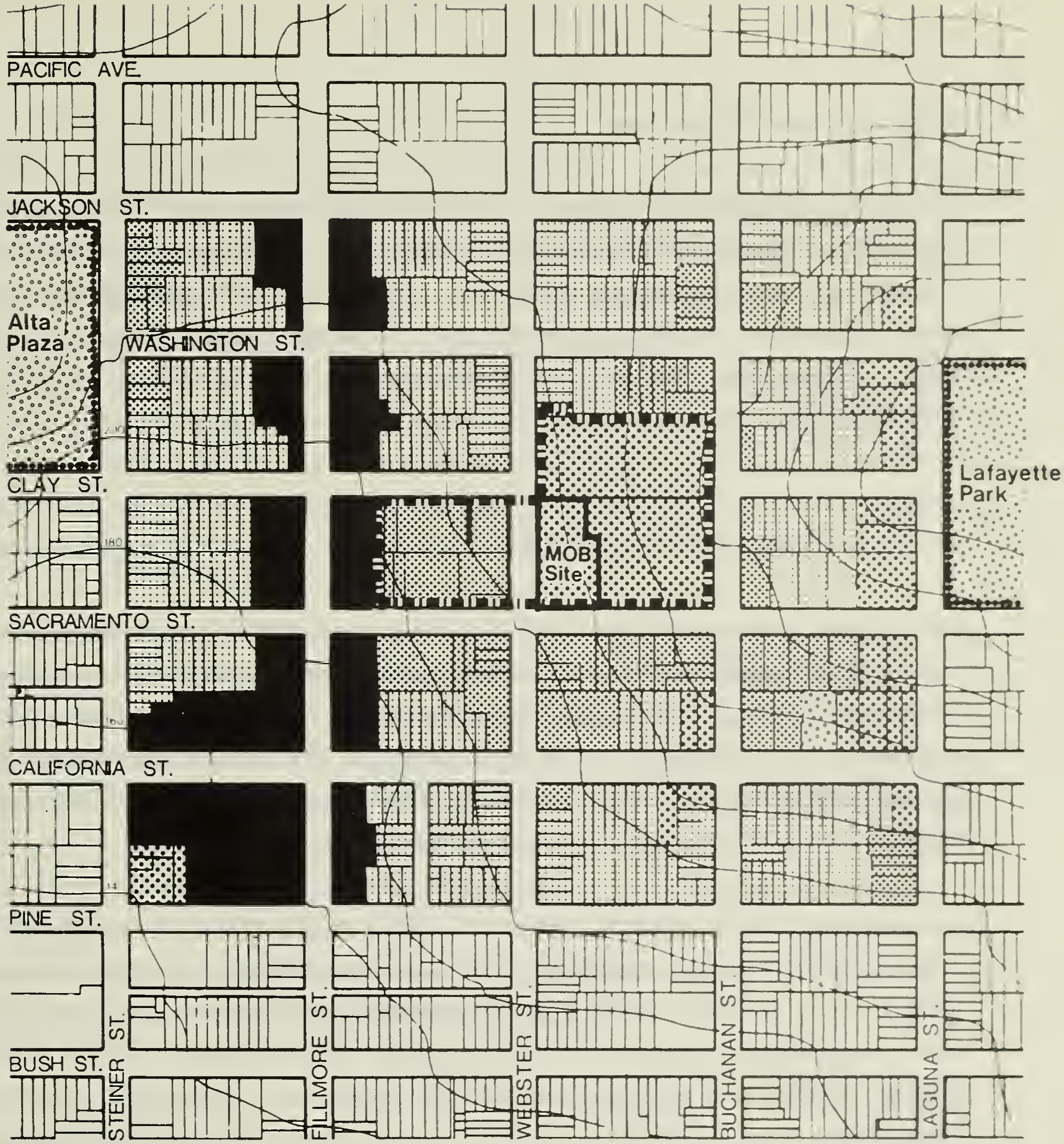
[1] Robert W. Passmore, San Francisco Zoning Administrator, letter of 2 April 1979, to Sedway/Cooke.

## Conditional Use Permit

Section 304.5(f) of the Planning Code provides that any Conditional Use Permit required for development by the institution shall not be authorized by the City Planning Commission unless such development is described in the institutional master plan which is on file with the Planning Department and which has been heard by the Planning Commission. If this initial requirement is satisfied, the Commission must make other findings prior to approving a Conditional Use permit application. These findings relate to (1) compatibility with the neighborhood, (2) general welfare of residents and workers in the vicinity, and (3) compliance with the City and County of San Francisco Planning Code and Master Plan. As with institutional master plans and revisions thereto, Conditional Use permit applications submitted by medical institutions must be submitted by the Planning Department to the West Bay Health Systems Agency for review and comment.

## Zoning

The proposed MOB site is subject to the regulations of the RM-2 zoning district, a moderate density mixed residential district. A map of the zoning districts applicable in the vicinity of the site is presented in Figure 9. Medical offices and other medical uses are permitted in an RM-2 district after specific authorization by the Planning Commission as a Conditional Use provided these uses are operated by and affiliated with a hospital, medical center or other medical institution which has an institutional master plan on file with the San Francisco City Planning Department. Non-residential structures in RM-2 district are additionally subject to a basic floor area ratio of 1.8 to 1. As defined by the City Planning Code, this ratio permits all of the buildings on a lot to have a total floor area of 1.8 square feet per each square foot of lot area. If proposed non-residential buildings have a floor area ratio which exceeds the applicable standards, the Planned Unit Development (PUD) procedure is available under section 304 of the City Planning Code to allow the City Planning Commission to permit buildings with greater floor area ratios than otherwise permitted.



# Figure 9
# ZONING & HEIGHT AND BULK DISTS.

## ZONING DISTRICTS

■ **C-2: Community Business**

▩ **RM-2: Moderate Density Residential Mixed**

▨ **RM-1: Low Density Residential Mixed**

░ **RH-2: Two-Family Residential**

⁘ **P: Public Use**

## HEIGHT & BULK DISTRICTS

⬚ **Open Space**

⬚ **160-F**

Maximum Height in Feet

Refers to Bulk Limits in City Planning Code, Section 270. Maximum Plan Demensions for Building over 80' in Height:

| | |
|---|---|
| Length | 110' |
| Diagonal | 140' |

SOURCE: SAN FRANCISCO CITY PLANNING CODE

### Height and Bulk Regulations

The proposed MOB site is subject to the regulations of the 160-F Height and Bulk District, as illustrated in Figure 9. Buildings and structures in this district are limited to a maximum height of 160 feet. The letter "F", specifies bulk limits which apply only to buildings segments over 80 feet in height. These bulk limitations, expressed as maximum plan dimensions, are length, 110 feet, and diagonal dimension, 140 feet.

## B. NEIGHBORHOOD CHARACTER

The neighborhood surrounding the site of the proposed MOB is commonly known as the Pacific Heights Neighborhood, its boundaries are shown in Figure 1, page 9. While the following discussion generally relates to this entire geographic area, it focuses on the area shown in Figure 8, page 22. The inhabitants of the Pacific Heights Neighborhood include residents, owners and employees of commercial establishments, and the employees, physicians and patients of PMC.

An essential insight into the character of this neighborhood is recognition and appreciation of its dual nature. On one hand, the neighborhood maintains a strong identity as a desirable residential neighborhood with high property values and rents, comprised of a mixture of housing types. Older residential uses in the area include attached and detached single family residences. Single-family and 2-unit homes range from 2 to 4 stories with narrow frontages and generous setbacks on narrow, deep lots. The setbacks minimize shadow impacts on the sidewalks, provide for landscaped areas and create an open, diversified neighborhood character. The single family homes are interspersed with well-maintained multi-unit structures, generally 4 to 5 stories, with wider street frontages and minimal setbacks, which add variety to the architectural style and residential densities of the streets.

The other aspect of the neighborhoods dual character is its long-term historical identification with a medical center, initially the first medical school in the western United States and more recently a major health care delivery center. PMC has a long history of serving the City of San Francisco, the Bay Area Region, and in some cases, Northern California.

Given this dual nature, the key to understanding the neighborhood character is the relationship between residents and the PMC. It is inevitable that this relationship has, at times, been one of conflict as the residents and PMC have sought to achive their own particular goals and objectives. This discussion does not attempt to comment on the merits of any particular conflict. It is important to note, however, that from this relationship has emerged a continuing dialogue between PMC and the residents concerning the future character of the neighborhood. It is fair to state that the future of the neighborhood will in some part be determined by whether this informal dialogue is successful in resolving conflicts, or whether resolution must be found in the political process.

A discussion of the neighborhood character would not be complete without noting the recent evolution of the Fillmore Street from a residential, neighborhood-oriented commercial area to one providing goods and services which attract a city and regionwide clientele. In response, residents are requesting legislation which would limit or control the approval of permits for the establishment of new bars, restaurants, dance halls, and financial and business institutions on the ten blocks of Fillmore Street between Webster and Steiner. It also includes the southern side of Pacific Avenue and northern side of California between Webster and Steiner Streets. As of the date of publication, the legislation was still pending and had not been approved by the Board of Supervisors.

## C. DEMOGRAPHY

The study area for the demographic analysis is Census Tract 135, which includes the MOB project site and encompasses the blocks bordered by Jackson, Laguna, California, and Steiner Streets. (See Figure 8, page 22.) The 1970 Census[1,2] provides the most recent, detailed demographic information on the population of

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[1] U.S. Department of Commerce, 1970 Census of Population and Housing - San Francisco, Oakland SMSA. 1972.

[2] Daniel, Mann Johnson and Mendenhall, et al, Socio-Economic Profiles: Nwx Study Area and 60 Individual Census Tract Areas. 1973.

the study area. The continual rehabilitation and increase in values of the residential and commercial properties in the area, major additions of PMC facilities, and changes in housing opportunities, including condominium conversions and the construction of a public housing project for elderly persons, have altered the demographic profile over the last 9 years. However, as a reference, a summary of pertinent data from the 1970 Census is provided below.

In 1970, the 3,241 residents of the study area were predominantly white, employed in a white collar occupation, and fell into the middle- to upper-income brackets. Renters occupied 88% of the housing units and 9% were owner occupied (condominiums accounted for less than 1%). In 1970 the area had a low vacancy rate of 3%. The population was fairly stable, with 31% of the residents having a length of residency of 3 or more years and 16% of the residents had lived at the same address for more than 10 years. In terms of age, 46.6% of the 1970 population of the neighborhood were young adults between the ages of 15 and 34.

## D. HOUSING

Housing within Census Tract 135 includes medium to high density single- and multi-family residential structures, 64% of which are 1 to 3 units and 36% are 4 units or more. Less than 1% are 30 or more unit structures[1]

Between 1968-1976 construction of 1,191 new residential units and demolition of 139 units occurred within the Marina Planning area.[2] (See Figure 1, page 9.) However, Census Tract 135 has been fairly stable over this same time period with the construction of only 2 structures for a total of 61 units and the demolition of one structure with 18 units.[3]

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[1] San Francisco Sanborn Maps

[2] San Francisco Department of City Planning, "Housing Information Series: Changes in the San Francisco Housing Inventory, 1976." September 1977.

[3] San Francisco Department of City Planning, "Housing Information Series: Changes in the San Francisco Housing inventory 1976." September 1977.

The most recent survey on vacancies of multi-family units in the Marina Planning area was conducted in 1973.[1] The survey indicated a relatively low overall vacancy rate of 2.1%. In 1970 the U.S. Census listed Census Tract 135 as having a 3% vacancy rate. In 1976 the medium advertised monthly rent for a 1-bedroom apartment in the Marina Planning area was $225.[2]

The number of condominium units in San Francisco has increased rapidly since 1970. The majority of these units are coverted units. One of the neighborhoods in which these conversions is taking place is the Pacific Heights neighborhood. Census Tract 135 (including the MOB project site) is within this area. It is estimated that in this neighborhood in 1978, 535 units were converted to condominium and 14 new ones were built.[3]

## E. VISUAL CHARACTER

The proposed project site lies in a topographic depression or saddle between the high points of Alta Plaza to the west and Lafayette Park to the east. Jackson and California Streets, respectively, provide the north and south boundaries for the visual character study area. Elements of visual character include views to and from the site, architectual styles and features of the buildings in the study area, the bulk and scale of these buildings, and landscaping and vegetation. The following discussion of these elements, as they apply to the study area, references Figure 10, and its 9 constituent photographs, each of which is identified by a letter. A map showing the vantage point of each photograph is presented in Figure 10.

The project site is currently vacant except for remnants of a brick and wrought iron fence along portions of Clay, Webster, and Sacramento Streets, (see Figure

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[1] Survey Research Center, University of California, "Residential Vacancy Survey." 1973.

[2] San Francisco Department of City Planning and the Real Estate Industry, Condominium Conversions in San Francisco, November 1978, page 29.

[3] Ibid.

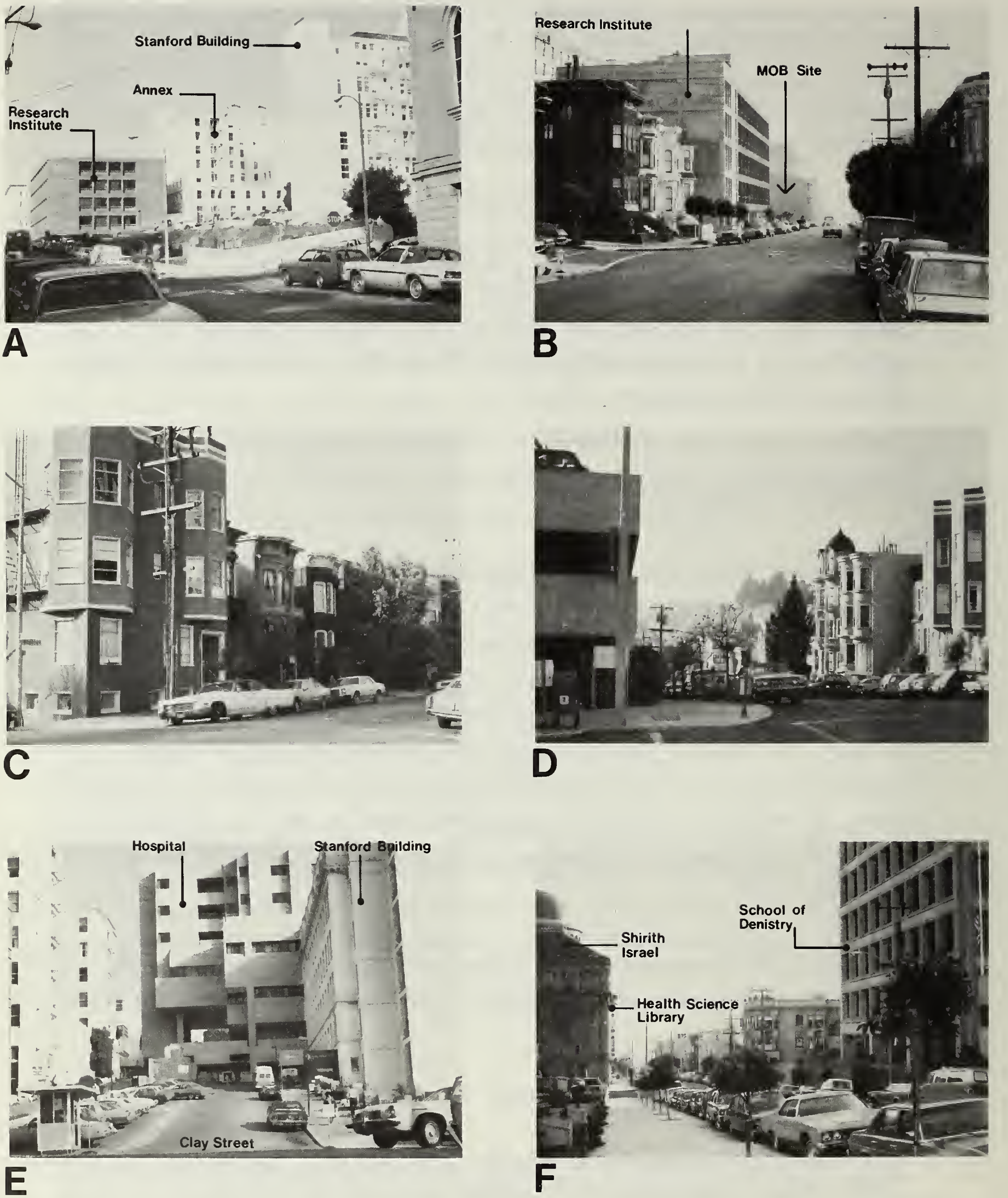
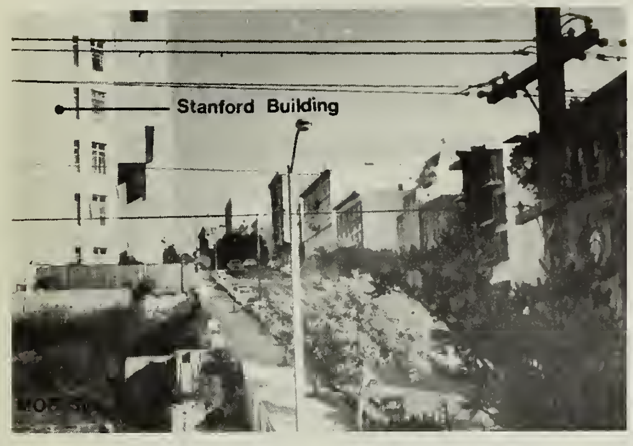


Figure 10 PHOTOS OF SITE AND SURROUNDINGS



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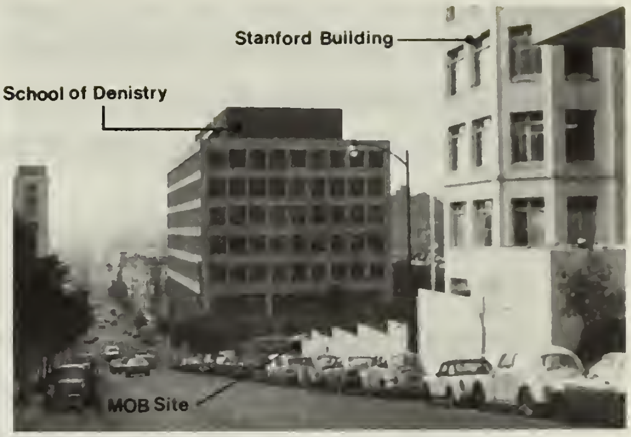

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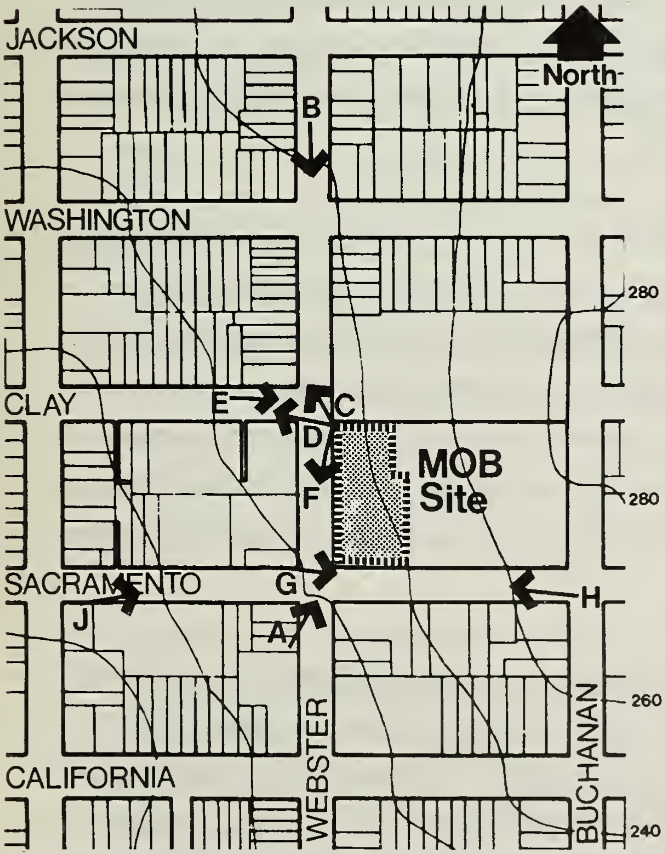

**PHOTO LOCATION MAP**

**J**

10-A). The site has retained the appearance of being recently cleared, with some grasses, iceplants, and shrubs growing in the rubble remaining from the domoliton of the structures which formerly occupied the site. Landscaping includes street trees in sidewalk planters along Webster and Sacramento Streets.

Looking north along Webster Street, as shown in Figure 10-A, the surrounding PMC buildings provide the visual backdrop of the site. The most visually dominant buildings are the 6-8 story Stanford Building and the 8 story Presbyterian Hospital. To the north, across the closed section of Clay Street, are the 5-story Research Institute and the 8-story Annex. These structures occupy the entire eastern and northeastern viewscape from the site.

The photograph in Figure 10-B shows the approach view of the project site moving south along Webster Street. As in the previous photograph, the 5-story Research Institute is visually dominant and obscures the proposd MOB site until the viewer reaches the Clay Street intersection. The bulk, scale and architectural style of the Research Institute contrast with the Victorian residences on the east and west sides of Webster Street, creating a visual distinction between the residential areas of the neighborhood and the PMC campus.

Figure 10-C provides another view of the 2 - 3 story Victorian residences located on the west side of Webster Street. A total of 12 structures face this segment of Webster Street (not all are shown in this photograph). With the exception of the corner structure, which has had its original architectural character altered by rehabilitation, these buildings cluster together to form a visual unit which is further integrated by the continuous row of street trees separating the residences from Webster Street. Other examples of such visual units are found throughout the study area.

The topography in the study area falls sharply to the west of the proposed MOB site before rising again in Alta Plaza. Therefore, primary distance views from the site are in this direction along Clay Street, as shown in Figure 10-D. This photograph illustrates the contrast between the modern design of the PMC garage to the south and the older structures to the north.

Figure 10-E illustrates the scale of the hospital and the Stanford Building. The vacated portion of Clay Street shown in this photo is used as a parking lot. The loading facilities at the Stanford Building also in this photograph would be used by the MOB. The large architectural gap seen in the hospital was incorporated into the hospital design in an attempt to preserve a view looking west from Buchanan Street.

Figure 10-F shows the view from the site looking south down Webster Street. The view is framed on the left by the Rennaissance style Health Services Library and the Dome of the Snyagogue of Congregation Sherith Israel. Both of these buildings are proposed as city landmarks by the Landmarks Preservation Advisory Board. The 6-story School of Dentistry, which is of modern design, frames the view on the right.

A major view corridor in the study area is provided by Sacramento Street as it runs downslope from the east to the west. Figure 10-G shows the view looking east on Sacramento Street from the project site. Along with a view of a portion of the site, this photograph illustrates the visual contrast between the scale and mass of the PMC building on the north side of the street and the mix of 4 and 5 story apartment buildings to the south.

The view looking west on Sacramento Street from the Buchanan Street intersection is illustrated in Figure 10-H. Note that from this perspective the proposed MOB site is bracketed by the 6-story School of Dentistry Building and the Stanford Building. The reverse of this view, looking east on Sacramento Street, from the Fillmore Street intersection is shown in Figure 9-J. Again note the visual dominance of the School of Dentistry and Stanford Buildings.

In general terms, street level views to and from the proposed MOB site are defined by topography and the height and bulk of surrounding buildings. As evidenced by the photographs in Figure 10, these views are limited. The primary distant view of the site is from Alta Plaza. From this vantage point, the white facade of the Stanford Building, Presbyterian Hospital behind it, and the School of Dentistry are the most prominent and identifiable features. The PMC campus is noticable from a distance to the south, however the site is not visually prominent from other, more distant, high points in the city.

The study area has no consistent, unifying architectural theme. PMC related buildings of modern construction and design contrast with buildings constructed in the late 1800's and early 1900's.

The scale and mass of the PMC campus likewise contrast with the surrounding older residential and commercial structures. The shadow impacts of the latter buildings on public areas are minimized by the variation of facades and front yard setbacks. However, the institutional buildings, with their heights, bulk, and minimal setbacks result in shadow impacts on public areas.

Landscaping in the study area includes street trees, residential landscaping, and the open space areas of Alta Plaza and Lafayette Park. Landscaping is generally varied and compatible with the residential and commercial sections of the study area. The landscaping provided around the PMC campus is dwarfed by the size and design of its buildings.

The Urban Design Element of the Comprehensive Plan of San Francisco contains policies, expressed both graphically and textually, which guide visual and aesthetic considerations with respect to new construction. The Pacific Heights Neighborhood is designated by the Plan as an area with an "outstanding and unique quality of visual form and character."[1] Plan policies relevant to the proposed MOB are contained in Appendix D, page 194, which also analyses the relationship of these policies to the proposed MOB. These relationships are summarized in Chapter IV, Environmental Impacts, page 57.

## F. TRANSPORTATION

### 1. Existing Traffic Conditions

The Pacific Medical Center and vicinity is served by a basic grid pattern of streets which includes 2 secondary thoroughfares,[2] as designated in the

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[1] San Francisco Department of City Planning, "San Francisco Urban Design Plan", 1971, page 49.

[2] Primarily intradistrict routes of varying capacity serving as collectors for major thoroughfares.

Transportation Element of the San Francisco Master Plan:

- California Street
- Webster Street, south of California

There are no major thoroughfares[1] or recreational streets[2] in the area. All other streets in the surrounding area are classified as local streets.[3]

Due to the scarcity of current traffic count data, the EIR transportation consultant implemented a manual traffic data collection program in a 14 intersection study area surrounding the project site as shown in Figure 11. As established by this program, the peak traffic hours[4] for most of these intersections occur in the morning between 8:00 and 9:00, and/or in the evening between 4:30 and 5:30. With 1 exception, the morning and evening peak hour levels of service for these intersections has been determined to be level A.[5] The exception is the intersection of Fillmore and California Streets, which has a C service level during the morning peak hour.[6] Table 1 presents the existing 2-way average daily traffic[7]

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[1] Cross-town thoroughfares whose primary function is to link districts within the City and to distribute traffic from and to the freeways.

[2] A special category of street whose major function is to provide for slow pleasure drives, cyclist and pedestrian use.

[3] Street intended for access to abutting residential and other land uses, rather than for through traffic.

[4] Peak hour is the 60 minute period in which the volumes of traffic is highest for the day.

[5] Level of service A describes a condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.

[6] Level of service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, with service volumes perhaps suitable for urban design practice.

[7] Average Daily Traffic (ADT) volume is the total volume of traffic crossing a fixed point over a 24-hour period, averaged over a month, a year, or several years.

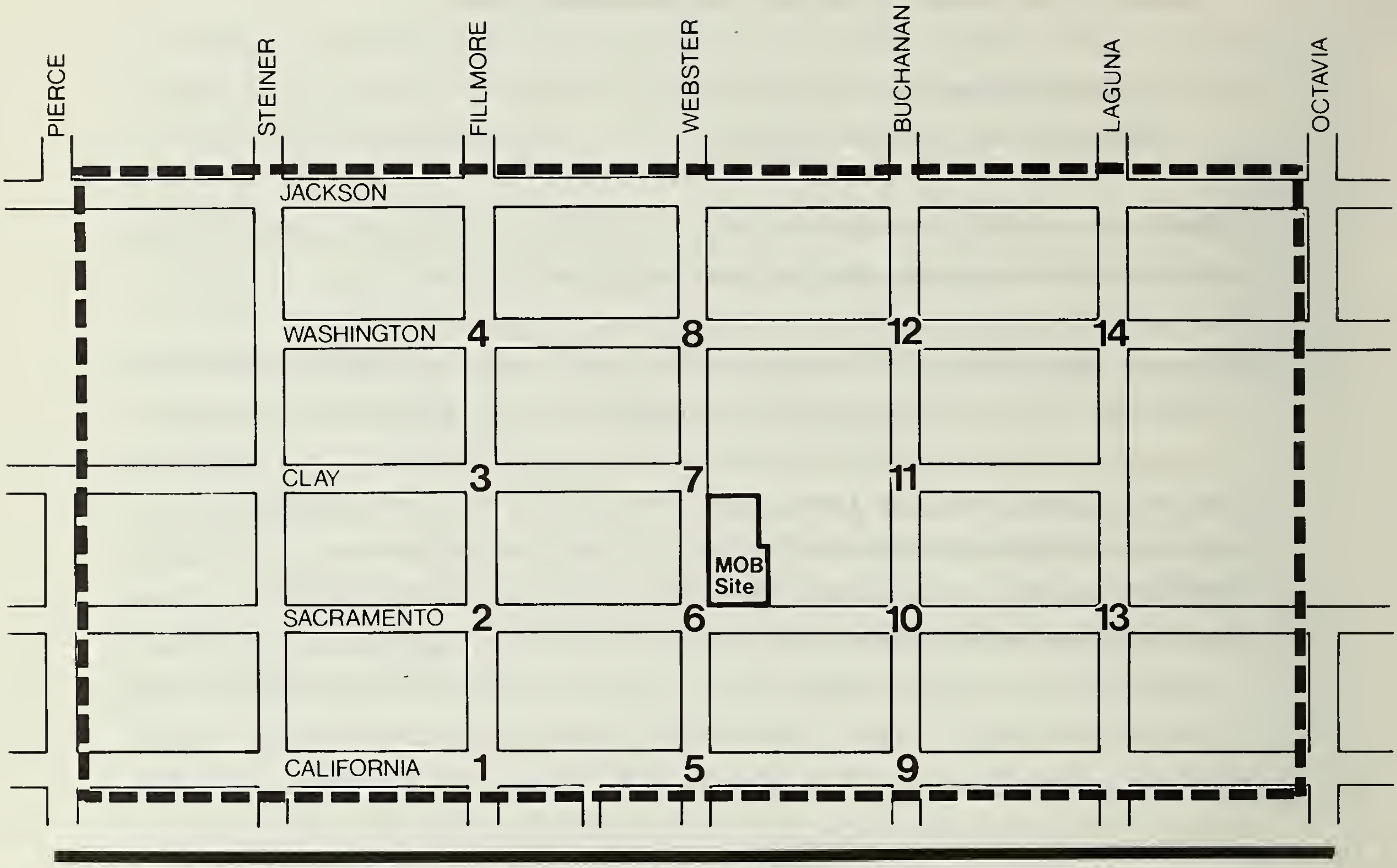

Figure 11 TRAFFIC AND PARKING STUDY AREA

▬ ▬ ▬ PARKING STUDY AREA BOUNDARY

North

1 NUMBERS INDICATE INTERSECTIONS AT WHICH TRAFFIC COUNTS WERE TAKEN

volumes for the streets in the 14 intersection study area. Table 2 lists existing peak hour capacity utilizations.

TABLE 1. COMPILATION OF EXISTING AVERAGE DAILY TRAFFIC

| Street Name | Existing 2-Way[1] Average Daily Traffic |
|---|---|
| Washington | 1600 |
| Clay (west of PMC) | 2800 |
| Clay (east of PMC) | 1000 |
| Sacramento | 5600 |
| California | 12700 |
| Fillmore | 7200 |
| Webster | 5400 |
| Buchanan | 2700 |
| Laguna | 4600 |

[1] The indicated values represent composite averages along the street sections under study.

Source: JDDA.

## 2. Existing Parking Conditions

A survey of existing street parking was conducted on 9 through 12 January 1979, between the hours of 8:00 a.m. and 6:00 p.m., within a 19 block study area, as shown in Figure 11, page 38. In this area, there are 155 metered and 1,034 unmetered legal parking spaces for a total of 1,189 legal spaces.

Table 3 indicates the total number of vehicles parked in the on-street parking study area for each hour between 8:00 a.m. and 6:00 p.m., and also lists the number of vehicles illegally parked during this time period. Throughout most of this time period, about 85% of the legal spaces were in use.

The survey indicates that a limited amount of on-street parking is currently available. However, as a practical matter, it should be considered that the on-street parking utilization is at full capacity between the hours of 11 a.m. to 4 p.m. Standard parking analysis practice considers a utilization of over 85% as

TABLE 2. EXISTING PEAK HOUR CAPACITY UTILIZATION USE

| # | INTERSECTION | AM PEAK HOUR |  | PM PEAK HOUR |  |
|---|---|---|---|---|---|
|  |  | % of Capacity | Level of Service[1] | % of Capacity | Level of Service[1] |
| 1 | Fillmore & California | 83 | C | 68 | A |
| 2 | Fillmore & Sacramento | 56 | A | 65 | A |
| 3 | Fillmore & Clay | 38 | A | 43 | A |
| 4 | Fillmore & Washington | 32 | A | 34 | A |
| 5 | Webster & California | 63 | A | 52 | A |
| 6 | Webster & Sacramento | 40 | A | 52 | A |
| 7 | Webster & Clay | 26 | A | 31 | A |
| 8 | Webster & Washington | 30 | A | 25 | A |
| 9 | Buchanan & California | 60 | A | 42 | A |
| 10 | Buchanan & Sacramento | 49 | A | 40 | A |
| 11 | Buchanan & Clay | 13 | A | 10 | A |
| 12 | Buchanan & Washington | 29 | A | 1 | A |
| 13 | Laguna & Sacramento | 42 | A | 46 | A |
| 14 | Laguna & Washington | 35 | A | 28 | A |

[1] A detailed description of the 6 standard levels of traffic service and their respective percent capacity utilization is listed in Appendix D, page __.

Source: JDDA

TABLE 3. ON-STREET PARKING USE

| Hour Ending | Total Space Available | Legally Parked | Percent Use | Illegally Parked |
|---|---|---|---|---|
| 9:00 AM | 1889 | 1069 | 89.9 | 28 |
| 10:00 AM |  | 995 | 83.7 | 21 |
| 11:00 AM |  | 1014 | 85.3 | 11 |
| 12:00 NOON |  | 1032 | 86.8 | 22 |
| 1:00 PM |  | 1045 | 87.9 | 28 |
| 2:00 PM |  | 1129 | 94.9 | 19 |
| 3:00 PM |  | 1120 | 94.2 | 27 |
| 4:00 PM |  | 1062 | 89.3 | 16 |
| 5:00 PM |  | 970 | 81.6 | 15 |
| 6:00 PM |  | 898 | 75.5 | 14 |

operating at full capacity. At this magnitude of utilization, long, time-consuming searching maneuvers are required for motorists to find an on-street parking space. These maneuvers also have a generally adverse effect on the traffic flow in the area.

Off-street parking facilities were also surveyed during the month of January 1979. The boundaries of the on-street and off-street parking survey areas are coterminous. Off-street parking is provided at a number of facilities within this survey area. The largest is the PMC parking garage, whose normal self-park design capacity of 395 vehicles is routinely expanded by approximately 10% during peak periods through a valet parking operation.

Supplementing the PMC garage are 8 small parking lots and garages that provide an additional capacity of 270 off-street spaces. Not included in the survey of off-street spaces are residential lots and/or garages and other privately owned, committed spaces which are unavailable for general public use. Table 4 summarizes the parking utilization of lots available for public use.

In summary, the off-street parking demand is in excess of the supply during most of the afternoon peak parking hours. Although there are a small number of unused spaces in the smaller off-street facilities, these are mostly reserved for specific users and/or special functions.

The total parking demand in the area of the Pacific Medical Center is currently at or exceeding the available capacity. The on-street demand reaches 95% of available legal spaces. Anyone attempting to find an on-street space is generally required to search the area for a significant time period. This also results in adverse effects on the traffic circulation in the area. There is some capacity in the smaller off-street facilities; however, many of these spaces are reserved for special functions. The Pacific Medical Center garage is currently operating over capacity for six hours during the day.

TABLE 4. OFF-STREET PARKING ACCUMULATION SUMMARY

| | SMALLER FACILITIES | | | PACIFIC MEDICAL CENTER PARKING STRUCTURE | | |
|---|---|---|---|---|---|---|
| Hour Ending | Parked Total Vehicles | Percent of Capacity | Parked Transient Vehicles | Parked Card Key[2] Vehicles | Parked Total Vehicles | Percent of Self-Park Design Capacity |
| 6:00 AM | 41 | 15.2 | 15 | 26 | 41 | 10.4 |
| 7:00 AM | 49 | 18.1 | 24 | 74 | 98 | 24.8 |
| 8:00 AM | 94 | 34.8 | 43 | 160 | 203 | 51.4 |
| 9:00 AM | 197 | 73.0 | 104 | 249 | 353 | 89.4 |
| 10:00 AM | 203 | 75.2 | 134 | 280 | 414 | 104.8 |
| 11:00 AM | 225 | 83.3 | 146 | 286 | 432 | 109.4 |
| 12:00 NOON | 214 | 79.3 | 137 | 284 | 421 | 106.6 |
| 1:00 PM | 229 | 84.8 | 154 | 280 | 434 | 109.8 |
| 2:00 PM | 242 | 89.6 | 159 | 276 | 435 | 110.1 |
| 3:00 PM | 237 | 87.8 | 155 | 271 | 426 | 107.8 |
| 4:00 PM | 206 | 76.3 | 135 | 234 | 369 | 93.4 |
| 5:00 PM | 165 | 61.1 | 90 | 178 | 268 | 67.8 |
| 6:00 PM | 88 | 32.6 | 46 | 100 | 146 | 39.6 |
| 7:00 PM | 62 | 23.0 | 34 | 64 | 98 | 24.8 |

[1] Parking facilities are located and described in Figure A-8, page 163, and Table A-16, page 165.

[2] Card key holders are people who pay by the month to park. See Appendix A, page 165.

Source: JDDA.

## 3. Existing Transit Conditions

The PMC and vicinity is served by 5 bus lines, and illustrated in Figure 12.

Line 22, the FILLMORE bus line, originates at the Marina (Fillmore and Chestnut) and runs southbound on Fillmore on its way to the shipyards (Third and Twentieth). The return trip traces approximately the same path, crossing the MOB study area northbound on Fillmore Street.

Line 3, the JACKSON bus line, originates downtown at Sutter and Market Streets and runs westbound along Sutter Street and northbound along Fillmore Street

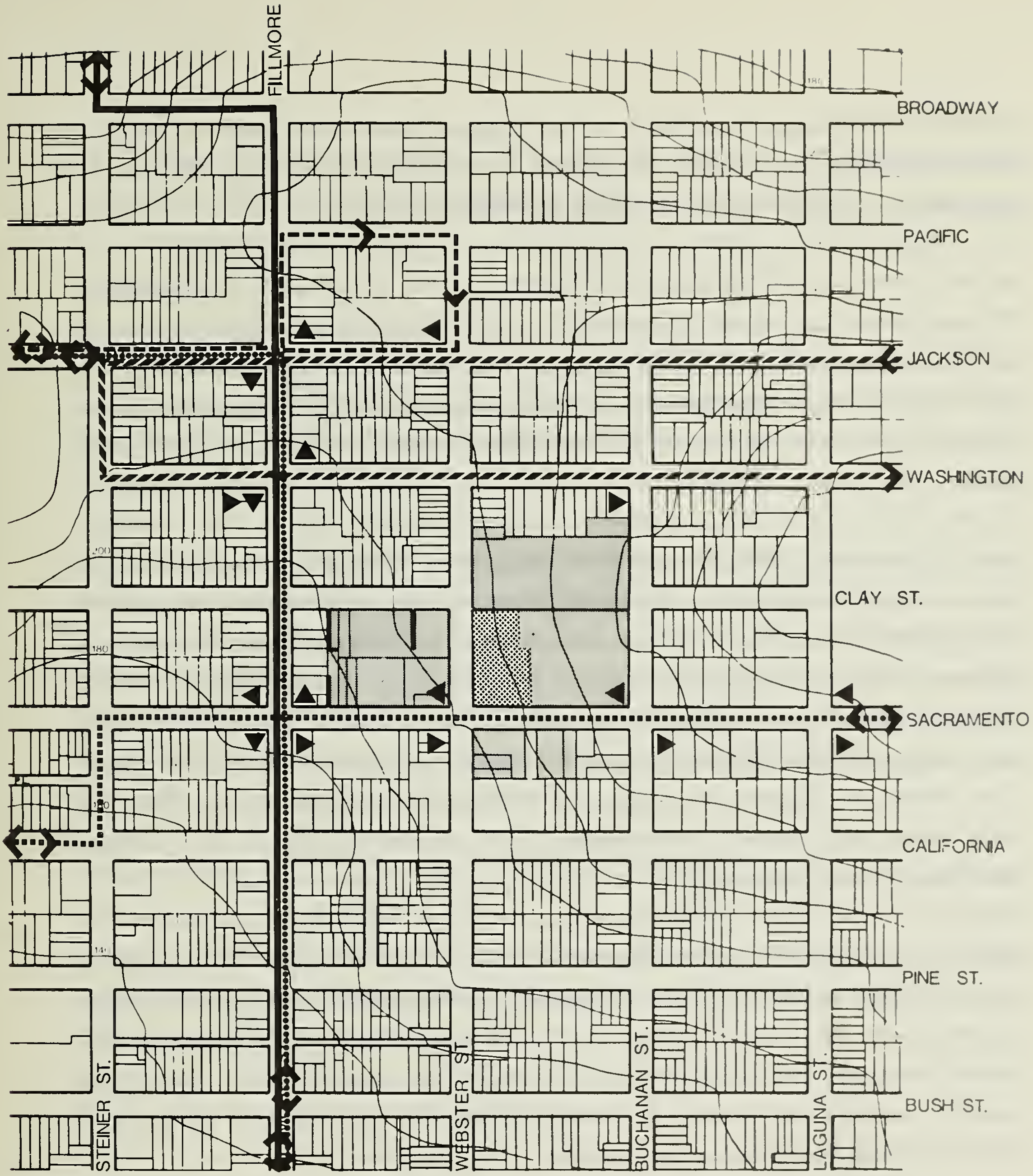

**Figure 12**

**BUS SERVICE-MOB STUDY AREA**

**MUNI LINES**

········ 55 Sacramento

╱╱╱╱ 25 Bryant

━━━ 22 Fillmore

•••••••• 3 Jackson

- - - - - 24 Divisadero

◀ Bus Stop and Service Direction

▒ PMC

░ MOB Site

SOURCE: SAN FRANCISCO
MUNICIPAL RAILROAD

across the MOB study area, turns left at Jackson Street on its way to California Street and Presidio Avenue. The return trip runs eastbound along Jackson and southbound along Fillmore as it crosses the MOB study area.

As designated in the Transportation Element of the San Francisco Master Plan, Fillmore Street is a transit preferential street. Along Fillmore Street, bus lines 3 and 22 provide between 18 and 22 buses per hour during the morning and afternoon peak hour periods.[1] This results in an average headway of about 3 minutes in each direction along the section of Fillmore Street which transects the MOB study area.

Line 55, the SACRAMENTO bus lines, desiginates downtown at Sacramento and Drumm Streets and runs westbound on Sacramento to its western terminus at Clement Street and Sixth Avenue. The return trip crosses the MOB study area eastbound also on Sacramento Street. This line has a variable headway due to increased limited stop service during weekdays peak periods. During the morning peak period the resulting average headway is about 3 minutes in the peak direction, eastbound towards downtown, and 9 minutes westbound. In the afternoon peak period the headways are reversed to 9 minutes eastbound and 3 minutes westbound, from downtown.

Line 35, the BRYANT bus line, originates at Alta Plaza at the Steiner and Jackson corner, makes a loop and runs eastbound on Washington to Hyde Street, then southbound to serve the Bayshore South area with a Cow Palace terminus. The return trip crosses the MOB study area westbound on Jackson Street. The average headway varies from between 9 minutes during the morning peak period to 15 minutes during the afternoon peak period.

Line 24, the DIVISADERO bus line, also originates in the immediate vicinity at Webster and Jackson and runs westbound on Jackson to Divisadero and thence southbound to its ultimate destination at 26th and Castro Streets. The return trip crosses the MOB study area eastbound along Jackson Street and turns north at the corner of Jackson and Fillmore.

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[1] Angelo Figone, Muni Transit Schedule Coordinator, Telephone Conversation, 31 October 1979.

In summary, 5 bus lines, with service throughout the City, are available within a maximum walking distance of 3 blocks from the proposed MOB site. These 5 bus lines combined have a total of approximately 50 buses per hour during peak periods.

The San Francisco Municipal Railway has established a maximum load factor[1] of 1.5 as the standard of service for the diesel buses which serve the MOB area. All 5 of the bus lines serving the area reach the load factor of 1.5 at their maximum passenger load points during the morning and afternoon peak hour periods. Although none of the maximum passenger loading points of the 5 bus lines are within the MOB study area, the 55 SACRAMENTO maintains a 1.5 loading factor while operating eastbound within the MOB study area during peak morning hours and both east and westbound during the peak evening hours. The 55 line operates with a 0.5 load factor while traveling westbound in the MOB study area during morning peak periods. During off peak hours the 55 line has a 1.1 load factor for both directions.[2] The load factors for the other 4 bus lines while they are within the MOB study area are discussed below.

The 3 JACKSON line while within the study area has a peak morning eastbound and westbound load factors of approximately 1.4 and 0.5 respectively. These load factors are reversed during the afternoon peak period. The 22, 24, and 25 bus lines all have light morning and afternoon peak load factors within the MOB study area, ranging in value from 0.1 to 0.5.

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[1] Load factor is a measure of bus usage and is the ratio of the number of passengers on board a bus at a maximum passenger load point to the number of seats provided by the vehicle. A load factor of 1.0 indicates that all available seats are being used.

[2] Angelo Figone, Muni Transit Schedule Coordinator, telephone conversation 31 October 1979.

## G. NOISE

To quantify the existing noise environment in the vicinity of the proposed site, and to provide baseline information against which project impacts can be assessed, a noise meaasurement survey was undertaken on Thursday, 29 March 1979. Noise measurements were made at 3 locations representative of the nearest sensitive receptors (residences and office buildings), shown on Figure 13. Measurement site 1 is on Webster Street just north of Clay Street in front of #2209 Webster. This site is representative of the residences on Webster Street and Clay Street closest to the proposed medical office building. Site 2 is at the corner of Webster and Sacramento Streets in front of the School of Dentistry and is representative of the noise environment at this intersection. Measurement site 3 is on Sacramento Street in front of #2315 Sacramento Street and is representative of the noise environment along Sacramento Street removed from the influence of traffic on Webster Street. Noise measurements at each site were made between 7:30 and 8:30 in the morning and between 2:00 and 3:00 in the afternoon. The results of the noise measurements are shown in Table 5, page 48.

The noise environment in the entire study area is dominated by traffic, with the major noise sources being diesel buses traveling east on Sacramento Street. These buses are going uphill and emit levels of up to 90 dBA[1] at 30 feet, typical of the building setbacks along Sacramento Street. In addition trucks, emergency vehicles, and motorcycles also contribute to ambient noise levels. The median $L_{50}$[2] noise level around the site is dominated by traffic on Webster, Clay and Sacramento Streets. The measurements corroborate the noise contours contained in the transportation noise element in the San Francisco City and County Comprehensive Master Plan. The plan shows that the noise level at the building facades

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[1] Sound levels are usually measured and expressed in decibels (dB), with 0 dB roughly corresponding to the threshold of hearing. The A-level in decibels is expressed as dBA; the appended A denotes that the A-weighted sound curve has been used to measure a sound level. This sound weighting curve is used to reflect the fact that human hearing is less sensitive at low and extremely high frequencies than in the frequency mid-range. A discussion of the foundamentals of noise measurement and environmental acoustics is contained in Appendix B - Noise, page 185.

[2] Median sound level, or a weighted sound level existing 50% of the time.

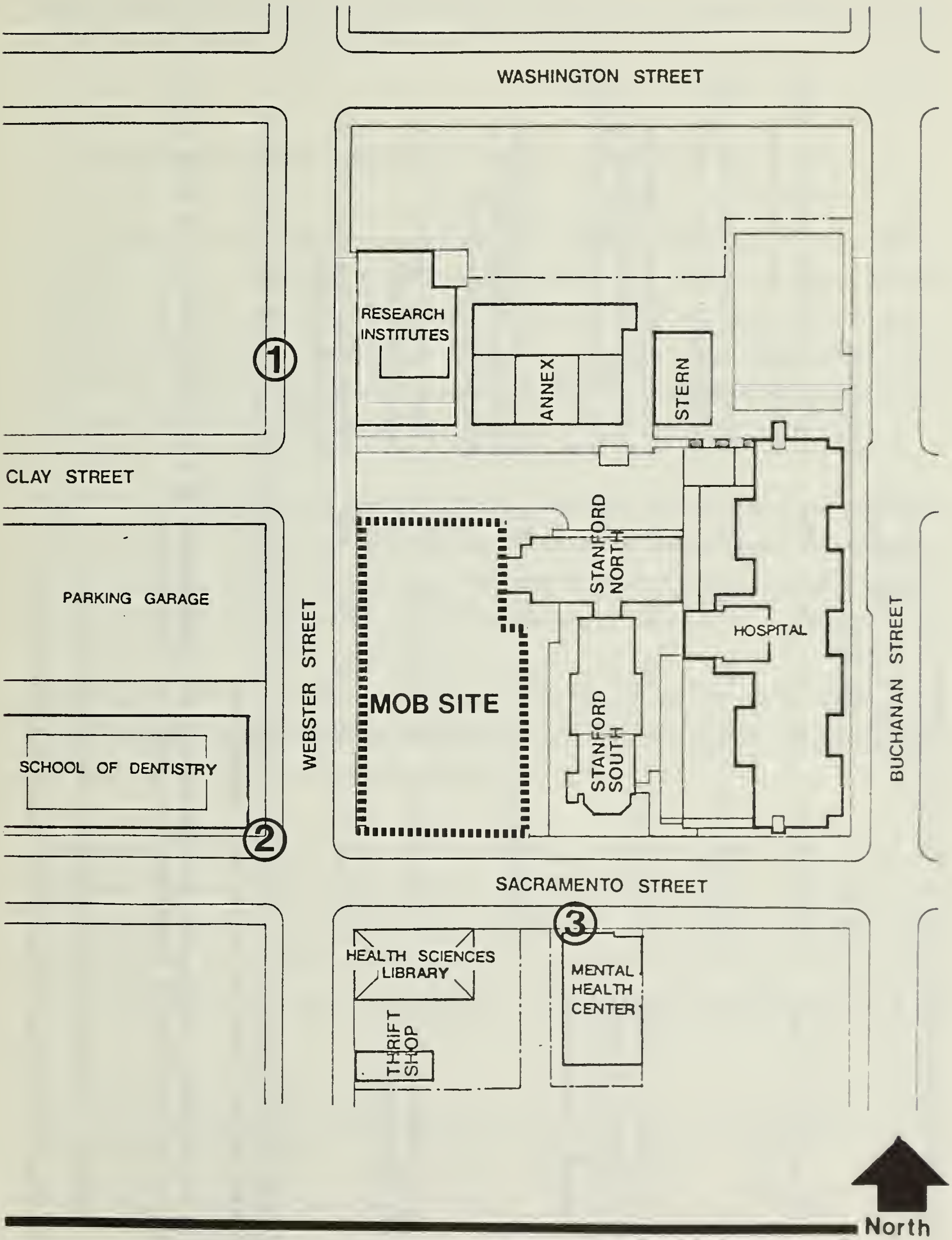

Figure 13 NOISE MEASUREMENT LOCATIONS MARCH 29, 1979

TABLE 5. Noise Measurement Survey, Thursday, 29 March 1979

| Site | Time | $L_{10}$* | $L_{50}$ | $L_{90}$ | $L_{eq}$** | Comments |
|---|---|---|---|---|---|---|
| | | (in dBA) | | | | |
| 1) At bldg. setback in front 2209 Webster | 7:20-7:30 a.m. | 64 | 55 | 50 | 60 | Traffic on Webster and Clay, buses on Washington and Sacramento |
| | 2:55-3:10 p.m. | 65 | 59 | 54 | 61 | Traffic on Webster and Clay, buses on Washington and Sacramento |
| 2) At bldg. setback in front of UOP Dental Clinic at NW corner of intersection of Webster & Sacramento | 7:40-7:55 a.m. | 76 | 66 | 59 | 71 | 7 Buses, East Bound (uphill on Sacramento Street, emitted 7-83 dBA maximum, traffic on Webster & Clay |
| | 1:50-2:50 p.m. | 72 | 65 | 59 | 70 | 2 Buses, East Bound (uphill) on Sacramento Street. Traffic on Webster and Clay Street |
| 3) At bldg. setback in front of 2315 Sacramento | 8:05-8:20 a.m. | 72 | 62 | 54 | 72 | 5 Buses on Sacramento Street (uphill) 85-90 dBA |
| | 2:30-2:45 p.m. | 70 | 62 | 56 | 70 | 2 Buses, East Bound (uphill) on Sacramento Street |

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*The sound level in dBA that was equaled or exceeded 10 % of the time; $L_{50}$, $L_{90}$ are the levels equaled or exceeded 50, and 90 percent of the time, respectively.

**$L_{eq}$ is the equivalent steady-state sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same time period.

Note: Weather conditions: clear, winds from the west at 0-10 mph.

Source: Charles M. Salter, Consultants in Acoustics, San Francisco.

along Sacramento Street is about 70 Ldn[1] and that on Webster Street north of Clay Street it is less than 60 Ldn.

## H. CLIMATE AND AIR QUALITY

The climate of San Francisco is dominated by the ocean breeze characteristic of marine climates. Because of this steady stream of marine air, there are few extremes of heat and cold. Temperatures exceed 90°F on an average of once a year and drop below freezing less than once a year. The warmest month is September, with an average daily maximum of 69°F; the coldest is January, with an average daily maximum of 56°.[2]

Winds in San Francisco are generally from a westerly direction and are persistent May to August. During the rainy season (October to April), however, winds flow from the south, as well as from the west and northwest. The strongest winds in summer are generally from the west, in winter from the south.

The project site is exposed to the ocean sea breeze and is windy most of the year. Because of its proximity to the Pacific Ocean, low clouds, fog, and drizzle are frequent during the spring and summer.[3]

Observations at the site revealed that local wind patterns generally follow the east-west corridors of Sacramento, Clay and Washington Streets. The Clay Street pedestrian extension crossing the site was found to be windy, especially near the main entrance to the hospital. This entrance is located within a view easement or "tunnel" through the base of the hospital. The pressure difference between the upwind (west) side of the building and the downwind (east) side of the building is responsible for the acceleration of the wind at this location.[1]

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[1] Ldn, day-night equivalent sound level, accounts for human senstivity to nighttime noise levels. See discussion in Appendix B - Noise, page 185.

[2] U.S. Department of Commerce, "Climate of San Francisco," Public Bulletin 279975, February 1978.

[3] U.S. Department of Commerce Climate of San Francisco, Public Bulletin 279975, February 1978.

San Francisco's persistent summer winds and its upwind position with respect to major pollutant sources continue to give it possibly the cleanest air in the Bay Area. Despite these advantages, there are periods, most often in fall and winter, when the air becomes stagnant. At these times the entire Bay Area has poor air quality.

The prevailing wind pattern in the Bay Area results in a deterioration of air quality east and south of San Francisco. Table 6 shows that, with the exception of nitrogen dioxide, areas downwind of San Francisco have more severe air quality problems than San Francisco. State and federal standards occasionally are not met in the Bay Area, resulting in the development of an Air Quality Maintenance Plan (AQMP) as part of the Environmental Management Plan (EMP) prepared by the Association of Bay Area Governments (ABAG) and other governmental agencies. The main San Francisco monitoring site is located at the Bay Area Air Quality Management District's offices at 936 Ellis Street, about 3/4 mile southeast of the project site. The data for San Francisco in Table 6 is representative of the project site except for carbon monoxide, which is strongly influenced by local traffic levels. Other local sources would be exhausts from existing boilers at the center.

Local residents have reported occasional odor problems near the project site, related to the cremation of laboratory animals.

The AQMP contains a comprehensive strategy for the long term attainment and maintenance of air quality standards. The Plan includes measures to reduce emissions from stationary sources and automobiles, and proposes transportation measures designed to reduce automobile use. The air quality problems addressed in the AQMP are photochemical oxidants, suspended particulates and carbon monoxide. The Draft AQMP was adopted by the ABAG General Assembly in June

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[1] Observations made by Donald Ballanti, Consulting Meteorologist, 7 February 1979.

## TABLE 6. NUMBER OF DAYS SELECTED POLLUTANTS EXCEEDED STATE OR FEDERAL PRIMARY STANDARDS, 1978[1]

| Monitoring Site | Oxidant[2] | Nitrogen Dioxide[3] | Carbon Monoxide[4] | Suspended Particulates[5] | Sulfur Dioxide[6] |
|---|---|---|---|---|---|
| San Francisco (Ellis Street) | 4 | 4 | 1 | 1 | 0 |
| Redwood City | 6 | 0 | 2 | 4 | 0 |
| San Jose | 40 | 0 | 23 | 7 | 0 |
| San Rafael | 13 | 0 | 1 | 1 | 0 |
| Fremont | 38 | 0 | 0 | 10 | 0 |
| Livermore | 35 | 0 | 0 | 9 | 0 |

[1] The State primary standards are specific concentrations and durations of air pollutants that reflect the relationship between concentration and undesirable effects. They are target values, and no timetable exists for their attainment. The Federal primary standards represent levels of air quality necessary for protection of public health, with an adequate margin of safety. The provisions of the Clean Air Act, as amended, require that by a specified date the Federal standards should not be exceeded more than once per year.

[2] A gas formed in a complicated series of chemical reactions between nitrogen dioxide and organic compounds, under the influence of the ultraviolet energy in sunlight. Production of oxidant is promoted on warm, sunny days when ventilation is low. In early 1979, the U.S. Environmental Protection Agency adopted a new oxidant standard. The previous standard of 0.08 parts per million for all oxidizing substances was replaced by a standard of 0.12 parts per million for ozone alone, the most prevalent oxidant. The table reflects the old standard which was in effect in 1978.

[3] A brownish colored gas created in the atmosphere by the reaction between nitric oxide emitted by automobile exhausts and ozone. Data shown is for the 1 hour federal standard.

[4] A clear, odorless gas which can cause dizziness, unconsciousness, and even death. The major source of carbon monoxide is the automobile. High concentrations of carbon monoxide are mainly a local problem, occurring near areas of heavy auto traffic when ventilation is poor. Data shown is for 8 hour federal standard.

[5] Liquid or solid particles suspended in the air. Much of this particulate matter may be of natural origins; in industrialized areas, man-made varieties are more prevalent. Data shown is for 24 hour state standard.

[6] A gas formed by the combustion of fuel oil containing sulfur. Data is for the state 24 hour standard.

Source: Bay Area Quality Management District, Air Pollution in the Bay Area by Station and Contaminants: 1978, March 1979.

1978, and has yet to be adopted or approved by the U.S. Environmental Protection Agency.

## I. COMMUNITY SERVICES

Water service for the project area is provided by the San Francisco Water Department. Existing lines in the site vicinity include a 12" high pressure main and an 8" main along Sacramento Street and 6" mains along Webster and Clay Streets. The storage supply source is located at Lombard and Hyde Streets.

Fire and police protection for the project area are provided by the San Francisco Fire and Police Departments. In general, crime rates for the neighborhood are low for the city as a whole.[1] The MOB study area is served by the northern police station and fire engine station number 38 located at 841 Ellis and 2150 California Streets respectively.

Pacific Telephone Company provides telephone service to the project area with underground facilities located in Webster Street.

Sunset Scavengers provides solid waste disposal service to the PMC facilities. PMC has a hazardous waste disposal system which meets all codes and standards for safety.[2]

A combined sewer and stormwater runoff control system is maintained in the project area by the City and County of San Francisco Department of Public Works. Existing lines include a 16" combined sewer main on Webster and Sacramento. The Southwest Waste Pollution Control Plant receives all effluent from the project area. Peak wet weather flows levels in the 16" collection mains are around 100% adequacy.[3]

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[1] Officer Paul Liebert, Field Operations Bureau, City of San Francisco Police Department, telephone conversation, 28 March 1979.

[2] Oren Reinbolt, Pacific Medical Center, Director of Plant and Systems.

[3] Jim Walsh, Engineer, San Francisco Department of Public Works, telephone conversation, 25 October 1979.

## J. ENERGY

The site of the proposed MOB is served by Pacific Gas and Electric Company (PG&E). PMC is presently served by a 12,000 volt distribution system on Sacramento Street and gas mains of various sizes located on Sacramento and Webster Streets. Table 7 shows the total energy consumption of the PMC Campus for the past three years.

TABLE 7. PMC TOTAL ANNUAL ENERGY CONSUMPTION, 1976-1978

| | Electricity* | Gas* |
|---|---|---|
| 1976 | 9,207,172 | 995,960 |
| 1977 | 8,421,774 | 812,247 |
| 1978 | 8,740,230 | 800,262 |

Source: PMC Director of Plant and Systems

*Kilowatt Hours
**Therms - A therm is 1,000 British Thermal Units (BTU), a standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water 1° Fahrenheit (251.98 calories) at Sea Level.

## K. TOPOGRAPHY, GEOLOGY AND SEISMICITY

### 1. Topography

The project site is in a topographic depression or saddle between Lafayette Park and Alta Plaza Park and has surface elevations ranging between 220' and 242'.[1] The site was excavated in the 1800's for the construction of two buildings which were demolished in 1973-74. The basements, foundations and portions of the walls remain and subsequently have been backfilled. Consequently, the existing site topography does not reflect natural conditions. Site topography consists of 2 generally level areas, one at approximately 200' elevation at the corner of Webster and Sacramento Streets, and the other at 242' elevation at Clay Street near Stanford Hospital. An earth slope connects these 2 level areas.

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[1] All elevations in this section are given with respect to city Datun, i.e., 8'6" above mean sea level.

## 2. Geology

The San Francisco peninsula generally consists of 2 geologic units; bedrock hills of the Franciscan formation[1] and surface deposits. At the project site the bedrock forms an east-west depression which is partially filled in and drains across the site toward Webster Street. Depth to bedrock varies between 16 feet along Clay and Sacramento Streets to 74 feet at the sites center. The surface deposits consist of materials introduced as a result of back filling and natural soils. The introduced deposits, predominantly sand fill with rubble and brick, occur in a 2 - 7 foot layer. The underlying natural soils are interlayered with no definite horizontal continuity. They consist of 4- to 14-feet thick layers of stiff and hard clays and 14+ feet thick layers of clayey and clean sands. The clays have low bearing capacity due to their high compressibility. Conversely, the sands, clayey sands, and the bedrock, having low compressibility, typically provide good support.[2]

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[1] Franciscan rocks are typical of the northern California Coast Ranges and underlie the hills of San Francisco. They consist of a mixture of dark colored muddy sediments, red, green and brown cherts and lava flows of black basalt, all matrial laid down on the floor of the Pacific Ocean about 100 million years ago. Cherts are rocks formed by deposits of silica containing microorganisms, which are transformed into hard, waxy or porcelain-like rocks. See Roadside Geology of Northern California, David D Alt and Donald H. Hyndman, Mountain Press Publishing Co., Missoula, Montana, 1975. Also known as Franciscan Formation or Franciscan Assemblage.

[2] Woodward-Clyde, "Preliminary Subsurface Exploration for the Proposed Medical Office Building, Pacific Medical Center," March 1978, page 4.

### 3. Seismicity[1]

The San Francisco peninsula lies between the active San Andreas and Hayward faults. It is in a region of high seismic activity. In 1838, 1865, 1906 and 1957, shocks occurred along the San Andreas fault, and in 1836 and 1869 shocks were experienced along the Hayward fault. A major earthquake is expected to occur at some unknown future date.[2]

The project site is approximately 6.5 miles from the San Andreas fault and 13 miles from the Hayward fault. There are no known active faults under the project site or in the surrounding area.[3] No potential liqufaction[4] area and no known landslides have been identified on or near the project site.[5]

The estimated intensity of ground shaking at the project site due to a future major earthquake similar to the 1906 event is expected to range from strong to very strong.[6] Intensities of the latter category result in extensive cracking of masonry with occasional collapse, and lurching, again with occasional collapse, of frame buildings on weak underpilings.

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[1] The relative suceptibility to earthquakes.

[2] A break in the continuity of a rock formation, caused by a shifting or dislodging of the earth's crust, such as in an earthquake, in which adjacent surfaces are differentially displaced parallel to the plane of the break.

[3] URS/John A. Blume, San Francisco Seismic Safety Investigation. Prepared for the San Francisco Department of City Planning. June 1974. Figure 1.

[4] The earthquake-induced transformation of a stable granular material, such as sand, into a fluidlike state, similar to quicksand.

[5] Op. Cit. Footnote 3, Figure 4.

[6] Op. Cit. Footnote 3, Figure 3.

## L. HYDROLOGY

The original hydrologic features of the project site and the surrounding area have been extensively altered by urbanization. Permeable surfaces are limited to landscaped areas, which are minimal. Portions of the site are presently covered by foundations and basements of the former structures. Consequently, existing onsite permeable surface areas are primarily located only along the sloping areas on the site's perimeter.

Virtually all runoff from the project area is surface runoff collected by the City's combined storm and sewer system.

The groundwater level appears to be generally deep, approximately 40 feet below the surface at the southeast corner of the site. Unless the excavation extends below approximately elevation 183, sustained dewatering is not necessary.[1]

## M. VEGETATION AND WILDLIFE

Vegetation is minimal, consisting primarily of grasses, iceplants and shrubbery. The bird population of the project area includes house sparrows and housefinches. These species generally adapt to areas with human disturbance, if adequate vegetation is available for food and shelter. Rodents would also be expected to inhabit the site.

There are no known rare or endangered flora and fauna in the project area.[2,3]

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[1] Woodward-Clyde, "Preliminary Subsurface Exploration for the Proposed Medical Office Building, Pacific Medical Center," March 1978, page 4.

[2] E.V. Toffoli, Regional Manager, California Department of Fish and Game, written communication, 20 February 1979.

[3] Ralph Swanson, Endangered Species Division, U.S. Fish and Wildlife Service, telephone communication, 27 February 1979.

# CHAPTER IV

# ENVIRONMENTAL IMPACTS

## A. LAND USE

### 1. Land Ownership

The project site, which is owned by PMC, would be leased to Pan-Med Ltd., for the construction and operation of the proposed medical office building. Given this long term leasing arrangement, the project will have little impact on land ownership patterns in the study area.

### 2. Existing Land Use

The construction of the project would entail redevelopment of the largest of the vacant sites in Census Tract 135.

In terms of the existing land use pattern, the use of the project site for a medical facility, as opposed to its use for residential or commercial purposes, would add 0.8 acres and 131,000 square feet of floor space to the existing inventory in the study area of approximately 7 acres and 719,100[1] gross square feet of floor space currently devoted to medical uses, respectively. This represents an 11% increase in acres devoted to medical use and an 18% increase in gross square feet of medical floor space devoted to medical use in Census Tract 135.

Since the adoption of the Comprehensive Revisions of the Zoning Ordinance in November 1978, new medical offices not part of a medical center are no longer a permitted use in residential zoning districts, except as a use accessory to a dwelling occupied by a physician. As explained in Chapter III, "Land Use", page 21, medical offices are conditionally permitted in residential districts. Medical offices are permitted in the C-2, Community Business Zone, which encompasses Fillmore Street (see Figure 9, page 27).

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[1] Pacific Medical Center. Pacific Medical Center Master Plan: 1977-87. 1977. p 39.

### 3. Land Use Regulations

Planned Unit Development (PUD)

Since the plan prepared by PMC in 1971 has been replaced by the PMC Institutional Master Plan (PMC Plan), an initial question is raised concerning whether the Planned Unit Development granted PMC under Planning Commission Resolution No. 6759, which authorized the construction of buildings pursuant to this earlier plan is still valid.

Three events since the authorization of the PMC PUD have made it appropriate to use this authorization only as a background for any Discretionary Review required by the City Planning Code.[1] These events are: 1) the adoption of the Institutional Master Plan requirement in 1976; 2) changes in the 1971 plan's concept for the utilization of the proposed MOB site, as reflected in the PMC Plan and its 1978 status report; and 3) the adoption of new zoning regulations for residential districts which now limit the floor areas of non-residential buildings in RM-2 districts to a ratio of 1.8 gross square feet of floor area per each square foot of lot area.

The 1971 PUD authorization includes conditions reflecting concerns which are still valid today. The conditions included in Resolution 6759 could either be modified or replaced by the Planning Commission when considering a conditional use permit application for the prepared MOB.

PMC Institutional Master Plan (Plan)

In May of 1977 there was a Planning Commission hearing on the PMC Plan. The PMC Plan specifies that construction of an Ambulatory Care Center (AC) on the site proposed for the development of the MOB. A letter from the Acting Zoning

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[1] Robert W. Passmore, Acting Zoning Administrator, San Francisco City Planning Department, written communication, 2 April 1979.

Administrator concludes that the distinction between an AC and an MOB is "not sufficient to require a new master plan hearing before proceeding to the Conditional Use Hearing"[1] for the proposed MOB. The May 1977 Planning Commission hearing, three comments pertinent to the MOB were voiced. The proposed project addresses each of these comments as follows: (1) the project is now designated as a medical office building; (2) the height, bulk, and form of the project have been changed from an 8-story 165,000 square foot rectangle to a 5-story, 127,000 square foot, stepped-terrace structure; (3) while the proposed MOB does not directly respond to the comment concerning sharing facilities to obviate the need for a medical office building at the proposed site, it should be noted that PMC has at various times initiated consolidation efforts with other medical institutions. While some of these efforts have met with success, others have been unsuccessful.[2]

### Conditional Use of Medical Offices in RM-2 District

Medical offices may obtain Conditional Use permit authorization in an RM-2 district when they are operated by and affiliated with a hospital or other medical center which has a current institutional master plan on file with the City Planning Department. In addition to satisfying other requirements, a use permit may be granted pursuant to a master plan only if said plan describes the proposed facility. As interpreted by the Zoning Administrator of San Francisco, the PMC Plan describes the development of a medical office facility on the site of the proposed MOB.

The proposed MOB would not comply with the 1.8 to 1 floor area ratio applicable to non-residential buildings in RM-2 district. However, the planned unit development (PUD) procedure is available under Section 304 of the City Planning Code to allow the City Planning Commission to consider buildings with greater floor area ratio than otherwise permitted. The PUD is one form of a conditional use procedure so that the use of the medical office building and the floor area ratio question may both be considered in the same City Planning Commission hearing with both issues covered in the same application.

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[1] Robert W. Passmore, Acting Zoning Administrator, San Francisco City Planning Department, written communication, 2 April 1979.

[2] Frederick C. Meyer, Executive Vice President of Pacific Medical Center, written communication, 9 April 1980.

### Height and Bulk Requirements

The height of the proposed MOB, calculated according to the procedure prescribed in Section 102.11 of the City Planning Code, is 78'. The bulk regulations of the 160-F Height and Bulk District would not apply to this structure because the regulations apply only to buildings 80 feet or taller.

## B. NEIGHBORHOOD CHARACTER

The construction of the proposed project would alter some aspects of the neighborhood character. During the construction phase (estimated to require 2 years), dust, noise, traffic and litter would increase, degrading the neighborhood immediately surrounding the site.

The long term operations phase of the project would impact the neighborhood character on a larger, permanent scale. Since the 1880's the land use of the site has been medical-related; the proposed project would be a continuation of this use. The construction of the proposed MOB would result in a further intensification and therefore, stronger influence of the regional-oriented medical uses in the neighborhood.

## C. DEMOGRAPHY

The MOB would provide facilities for 125 doctors and employment for 174 persons. While it is likely that some of these persons would choose to become residents of the area, it would not be expected that these new residents would noticeably change the existing demographic characteristics of the area.

## D. HOUSING

The construction of the MOB would not necessitate the demolition of any housing stock. However, the construction of the MOB could affect the demand, and hence, the availability of rental housing in the area. Given the shortage and increased costs of fuel, as well as the attributes of the neighborhood, it could be assumed that some of the doctors and employees who would occupy the proposed MOB would prefer to live in proximity to their place of work. The vacancy rate of the Marina Planning area, which includes CT 135, was last recorded in 1973 at 2.1%.[1] The current vacancy rate is estimated to be about the same. There has been no development of new units in CT 135 from 1976 to the present and no development is anticipated given existing city policies and neighborhood sentiment. Consequently, any increase in demand for housing in a limited supply area would lower the vacancy rate even further and could result in higher rents.

## E. VISUAL CHARACTER IMPACTS

Construction of the proposed MOB would result in the elimination of a vacant parcel which was the site of 3 medical buildings until 1974 (see Figure 3, page 11). Although this lot is presently poorly maintained, it provides an open space in an area characterized by tall buildings.

Construction of the proposed MOB would impact on the views to and from the project site, shown in Figure 14. Superimposed on each of the photographs is the outline of the building envelope of the proposed MOB.

There are few distant vantage points from which the proposed MOB would be a dominant visual element. The majority of the City's elevated viewing points are either too distant or have their views to the site blocked by intervening topographic features and buildings. As shown in Figure 14-A, the MOB would be visible from Alta Plaza. However, because of the greater bulk and height of the existing PMC buildings against which it would be seen, the visual prominence of the MOB would be diminished. The MOB would somewhat reduce the apparent

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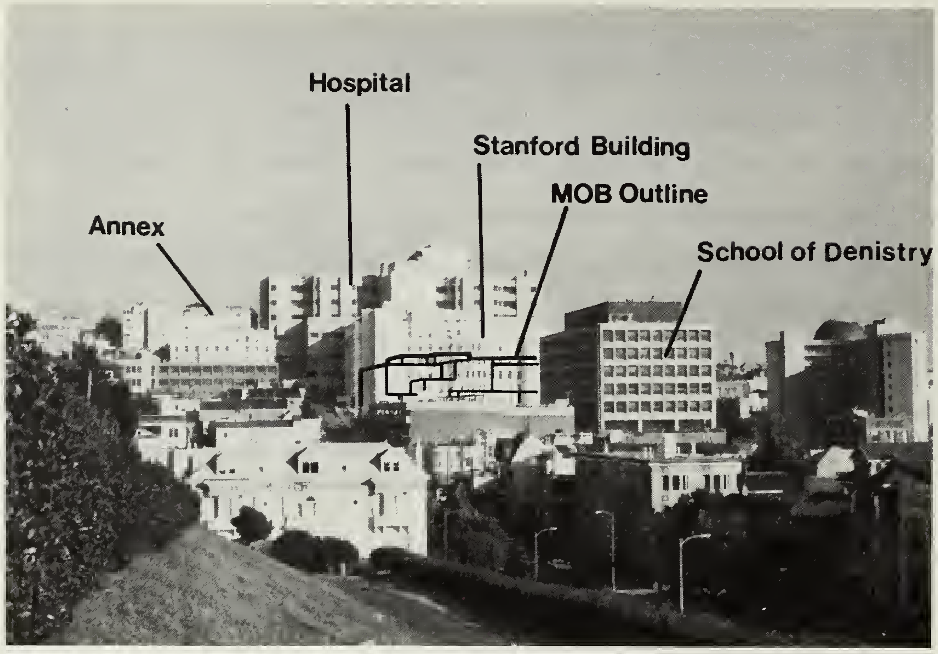
[1] San Francisco Department of City Planning, "Residential Vacancy Survey", 1973.



A

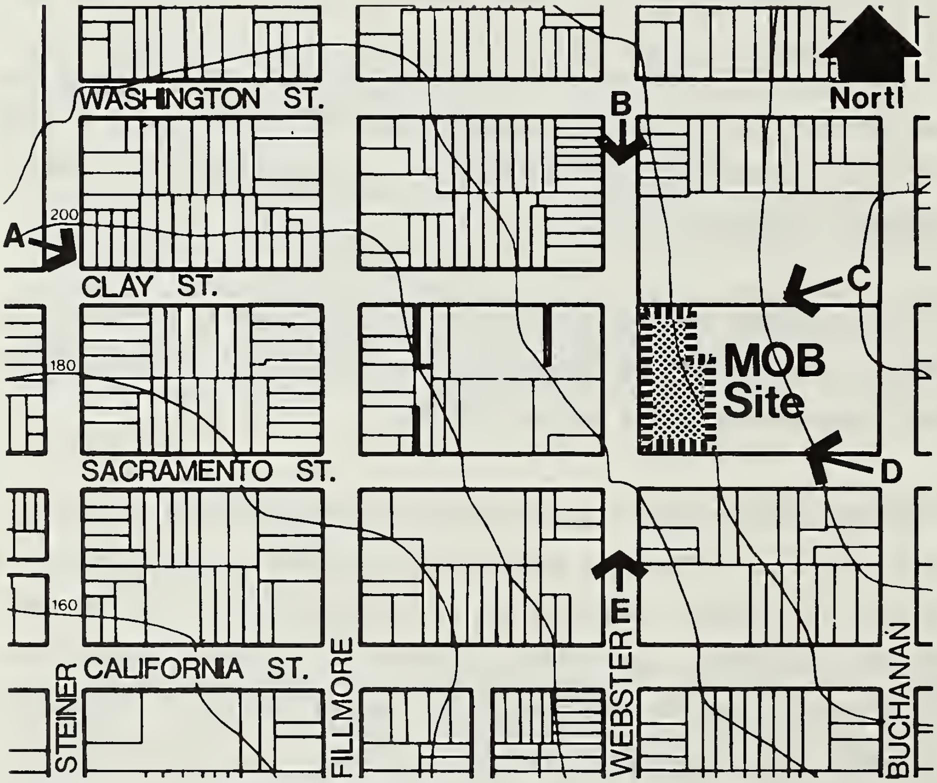
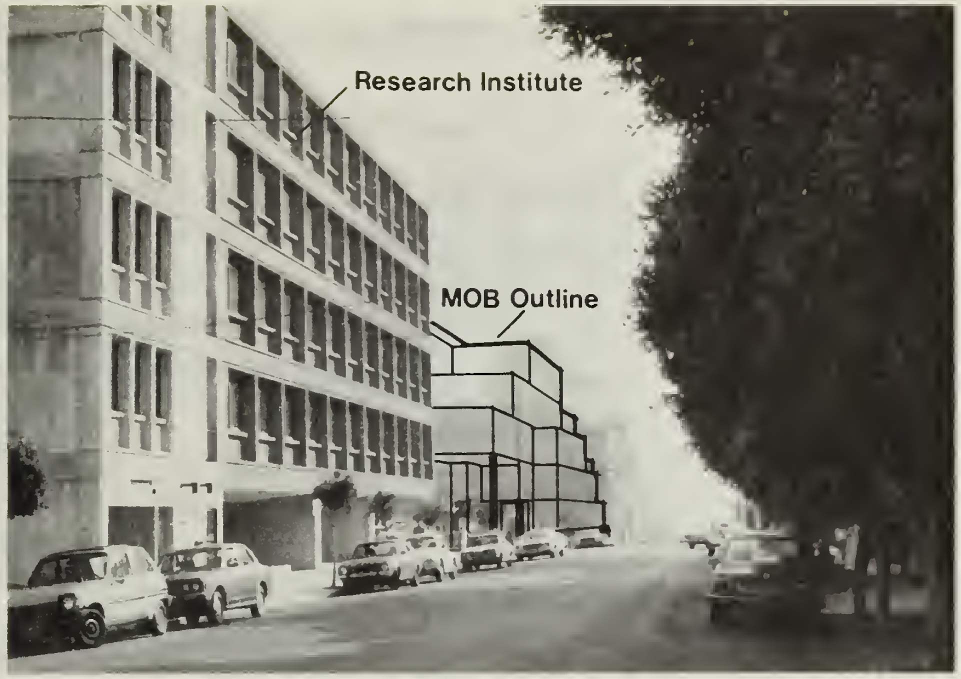


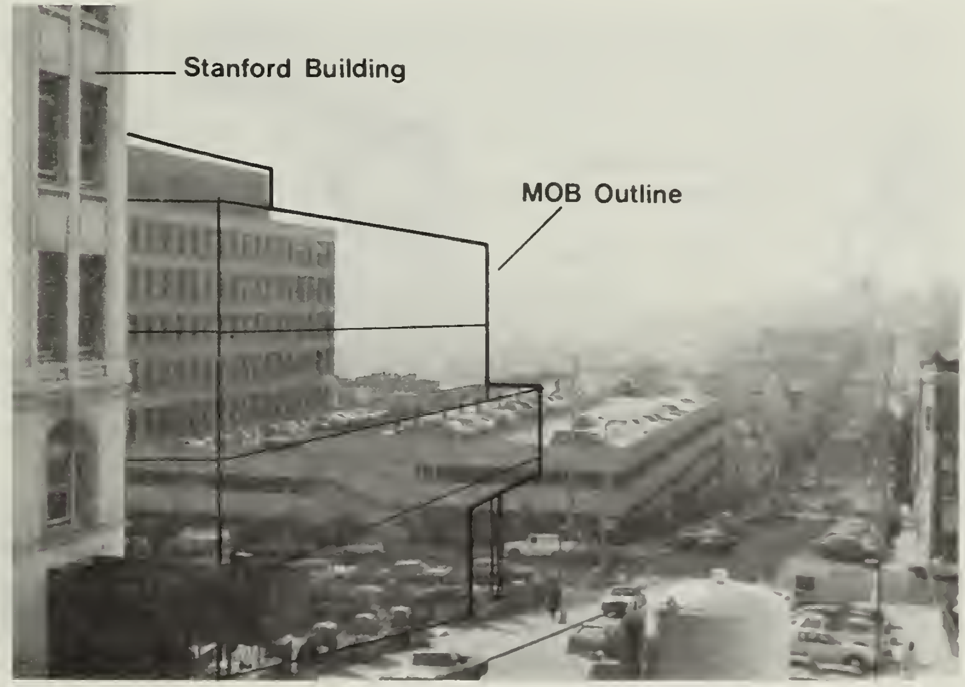
PHOTO LOCATION MAP

**Figure 14 SITE PHOTOS**

SUPERIMPOSED BLACK LINE INDICATES MOB POSITION

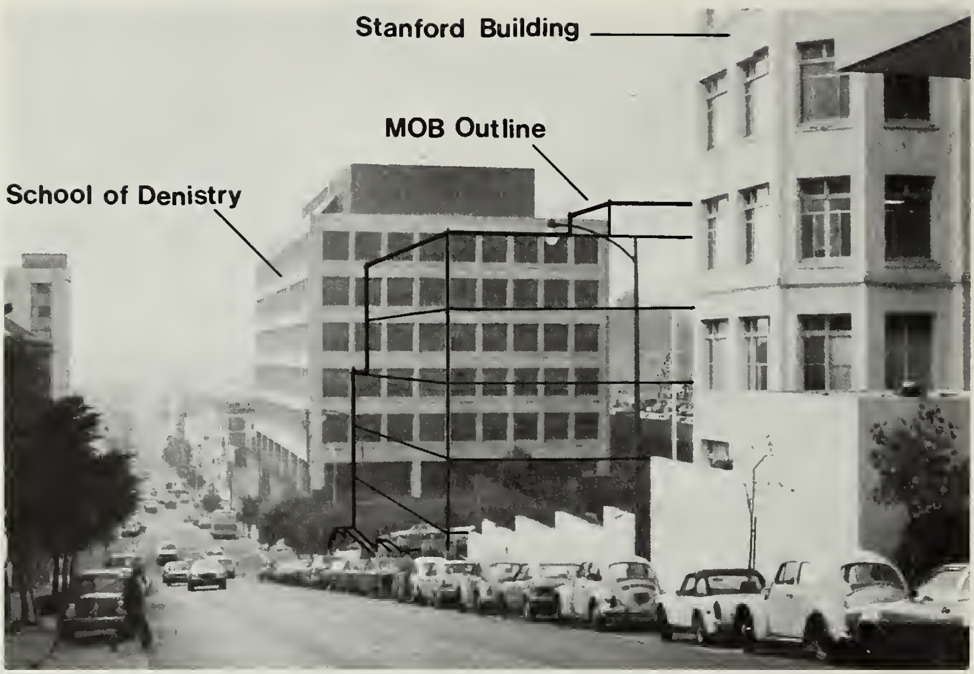


B

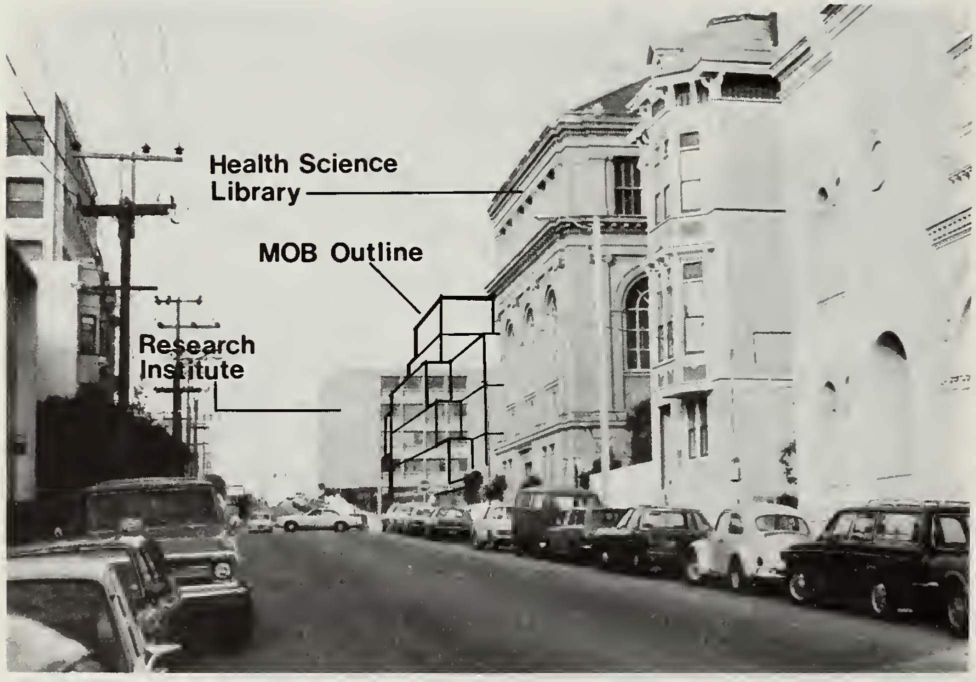


C

SUPERIMPOSED BLACK LINE INDICATES MOB LOCATION



D



E

SUPERIMPOSED BLACK LINE INDICATES MOB POSITION height and visual prominence of the Stanford Building.

The visual impacts of the proposed MOB would be most directly experienced from vantage points closer to the project site. Looking south on Webster Street, the MOB would be seen from street level and from the upper floors of residences on the west side of Webster between Washington and Clay Streets. Views of the MOB from the sidewalk on the west side of Webster Street (Figure 14-B) would be partially obscured by existing street trees. From this vantage point, the MOB would be seen as a series of ascending terraces or steps, the upper one of which would partially obscure the dome of the Sherith Israel Synagogue.

The most expansive view of the project area is to the west as seen from Burns Memorial Court, a plaza open to the public, located at the top of the Clay Street pedestrian walkway (see Figure 14-C). This view, which now encompasses approximately 30° of the horizon and includes Clay Street, Alta Plaza and a vista of roof tops and trees extending to the limiting land features near Presidio Avenue, would be partially blocked by the north facade of the MOB. It should be noted that this view was curtailed to a somewhat greater extent by the 5 story Lane Hospital (see Figure 15, page 66) which occupied the northern portion of the proposed MOB site until 1974. Also, the view is only available to viewers who are standing at the western edge of Burns Court, or descending the stairs along the northern side of the Clay Street pedestrian walkway.

Views along the other major view corridor in the study area, Sacramento Street looking west, would not be obscured by the MOB and would continue to be dominated by the School of Dentistry Building (see Figure 14-D). The MOB would be visible looking north along Webster Street, as illustrated in Figure 14-E, but the Renaissance facade of the Research Library would continue to dominate the foreground, with the Research Institute Building remaining a strong visual element in the distance.

The terraced or steppd facade design of the Webster Street frontage of the proposed MOB would attempt to relate the apparent visual height of the building to the older 2 and 3-story residential buildings in the immediate vicinity of the project site. Apparent visual height is the height of that part of the facade of a building in closest proximity to the sidewalk, and therefore to pedestrians. Due to

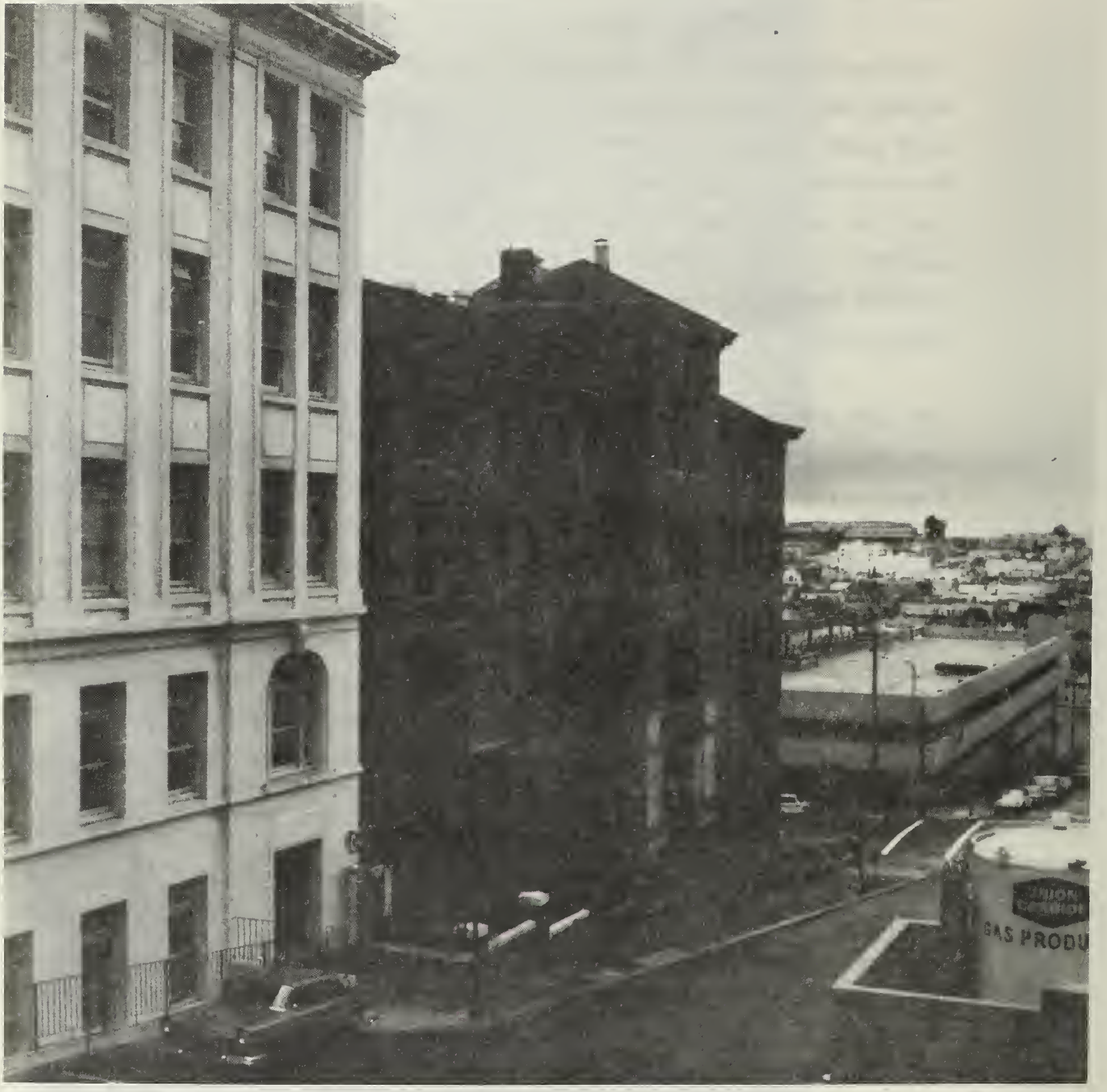


**Figure 15 VIEW FROM BURN'S MEMORIAL COURT**
PRIOR TO DEMOLITION OF COOPER AND LANE BUILDINGS

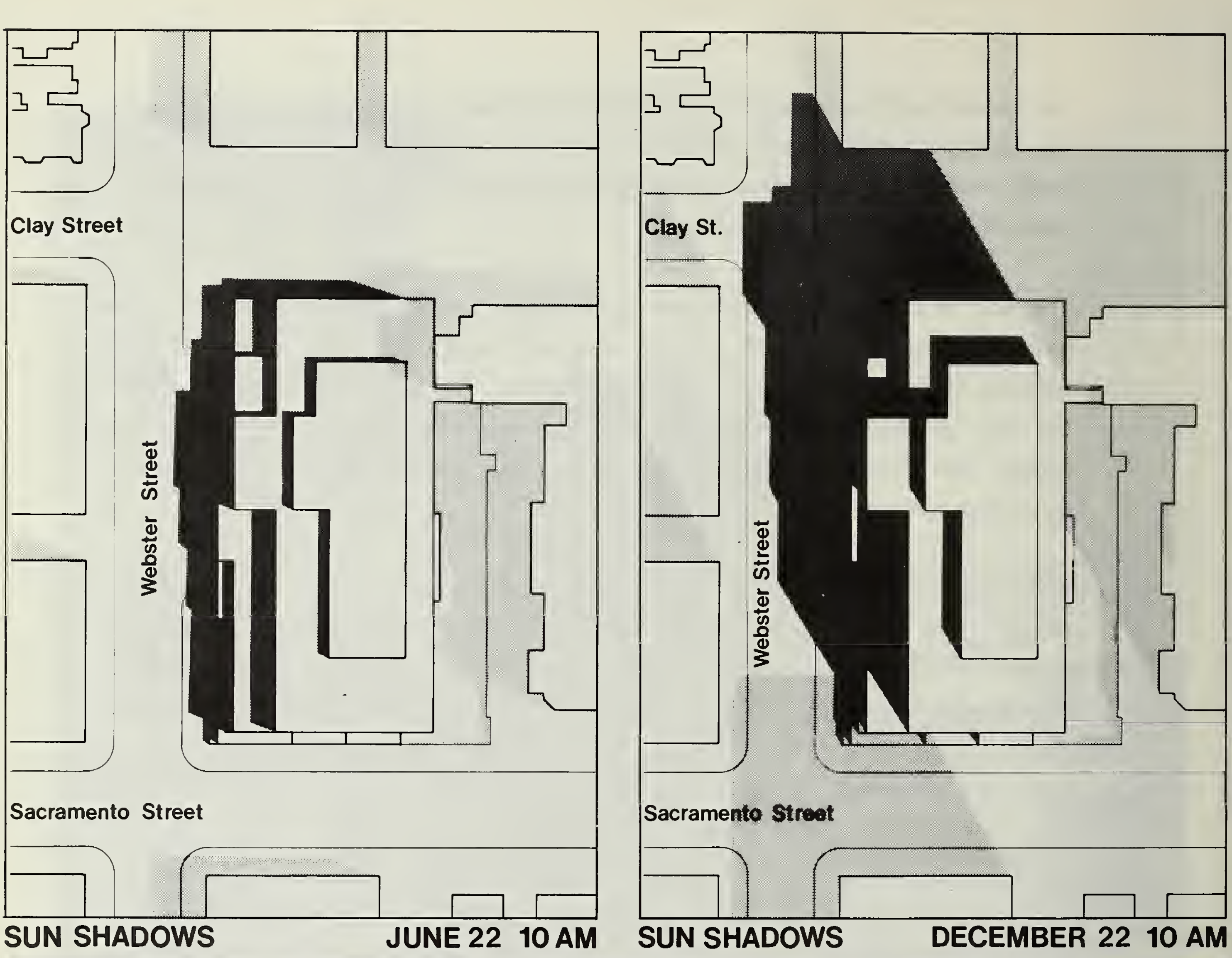
the pedestrian's line of sight, the height of this part of the facade establishes for the pedestrian the apparent height of the building. The stepped terrace design would modify the wall effect which would otherwise be created by a uniform, 5-story facade flush with the sidewalk.

The MOB design would also attempt to articulate the Webster Street length of the building, which extends a full block, into horizontal units more compatible with existing neighborhood residential building types. The proposed design of projecting bays of glass at different positions on each level would further break the facade into visual units approximating the bay windows common to Victorian structures nearby.

The primary exterior finish material would be buff-colored precast concrete-based panels. The project architect has stated that the building design, while more related to existing PMC campus buildings, would attempt to provide a visual link to the detailing found in Victorian buildings by the modeling and surface relief possible with the construction material, and by the introduction of a color band below the window at each level.

Figures 16 and 17, pages 68 and 69, illustrate the shadow impacts of the proposed MOB. On June 22, the date of the highest sun angles in the Northern hemisphere, shadow impacts are at a minimum. No shadows would be cast by the MOB on surrounding buildings. The east sidewalk of Webster Street would be shaded in the early morning, and the MOB plaza would be shaded beginning in the early afternoon. On December 22, the date of lowest sun angles in Northern hemisphere, the MOB would cast shadows on the Webster Street east sidewalk and the Clay Street vacation in the early morning. As the day progresses, shadows would shift to shade the Research Institute Building, the annex, and late in the afternoon, the western facade of the Stanford South Building. A landscaped area on the east side of the MOB, shown as a "Plaza" on the site plan in Figure 6, page 16 would have full or partial sun from approximately 9:30 to noon during this time of year.

The MOB design would include the use of vegetation in planter boxes, both at street level and along the terraces on the Webster Street side of the building, to soften the geometric edges of the building (see Figure 5, page 14).



SUN SHADOWS JUNE 22 10 AM

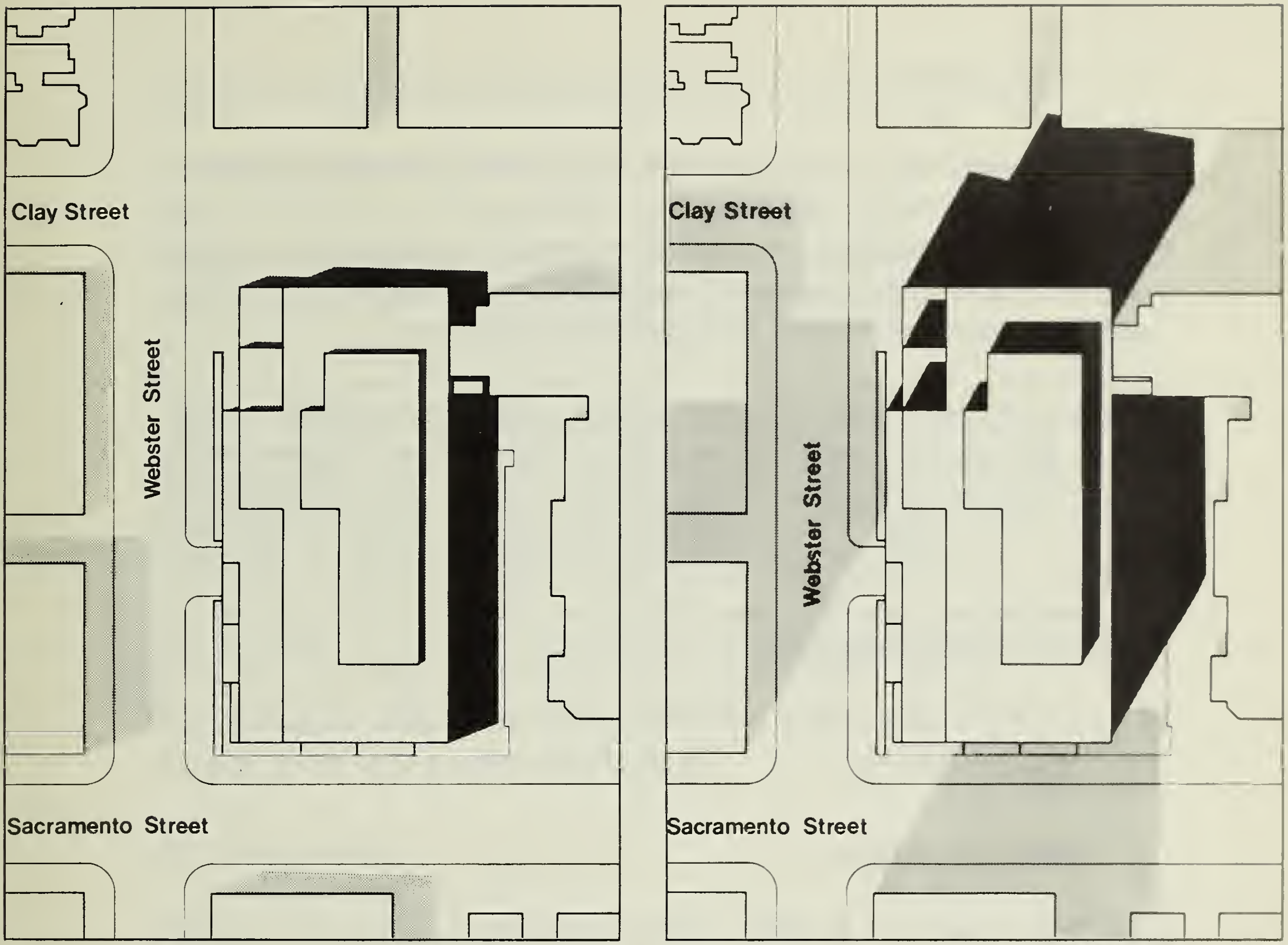
SUN SHADOWS DECEMBER 22 10 AM

Figure 16 SHADOW IMPACTS OF MOB AND ENVIRONS

░ SHADOW FROM EXISTING BUILDINGS

▓ SHADOW FROM PROPOSED MEDICAL OFFICE BUILDING

North



SUN SHADOWS JUNE 22 2 PM

SUN SHADOWS DECEMBER 22 2 PM

Figure 17 SHADOW IMPACTS OF MOB AND ENVIRONS

░ SHADOW FROM EXISTING BUILDINGS

▓ SHADOW FROM PROPOSED MEDICAL OFFICE BUILDING

North

The design and siting of the proposed MOB would generally conform to the policies of the San Francisco Urban Design Plan. The Design Plan is divided into two sections; urban design plan maps and urban design plan policies. The maps and policies require MOB conformance to applicable issues dealing with city pattern, new development, conservation, and neighborhood environments.

The MOB design conforms to the major city pattern and new development policies in all the size, bulk, visual, and landscaping policy sections. Conservation of historic architecture and views has influenced the design of the MOB as discussed earlier in this chapter. The neighborhood environment sections of the urban design plan mainly deal with concerns for transportation impacts, which are discussed below. Appendix D, page 194 discusses in detail the conformity of the MOB to the Urban Design Plan.

## F. TRANSPORTATION

### 1. Construction Impacts

#### a. Traffic Impacts

Traffic impacts of MOB construction would depend on the number and type of construction vehicles, the timing of construction traffic, and the choice of access routes to the site. Construction vehicles would include concrete trucks, flatbed trucks ranging from 2 to 10 tons, and miscellaneous smaller trucks and vehicles. Construction activities would occur only on weekdays between 8 a.m. and 4:30 p.m. therefore, construction traffic would be limited to this time period. Vehicular traffic to the construction site would use Sacramento Street and Webster Street south of Clay Street. Direct construction vehicle access to the proposed site would be via the existing closed section of Clay Street located on the north side of the site, as shown in Figure 6, page 16, MOB Site Plan.

Construction vehicles on weekdays during working hours would impede regular traffic flows on Webster Street between Washington and Sacramento Streets. At certain times during MOB construction it would be necessary to exclude all regular traffic from the segment of Webster Street between Clay and Sacramento

Streets, which would cause additional disruptions in normal traffic flows.

### b. Parking Impacts

During a typical MOB construction day, it is estimated that approximately 89 construction workers would be on-site. It is the usual practice for construction workers who drive to the job site to be responsible for finding their own parking. Ordinarily the workers would compete for the available supply of on and off-street parking. However, Pan-MED has agreed to provide free remote site parking, possibly in Japan Town. The remote parking site would be served by a shuttle bus for MOB construction workers thus eliminating the parking impact which the presence of construction workers would have otherwise created.

Approximately 14 on-street parking spaces along the east side of the Webster Street would be unavailable during MOB construction. The temporary loss of these 14 spaces during construction of the MOB would cause a temporary 1.2% decrease in available on-street parking spaces.

### c. Transit Impacts

As shown in Figure 12, page 43, Bus Service - MOB Study Area, bus lines do not travel along Webster Street between Washington and Sacramento, the street segment which would be most affected by MOB construction traffic. Some portion of the approximately 89 MOB daily construction workers would use bus service to travel to and from the job site.

### d. Pedestrian Impacts

Pedestrian traffic along the east side of Webster Street between Clay and Sacramento Streets, and along the north side of Sacramento Street between Buchanan and Webster Streets would be disrupted during MOB construction.

## 2. Operation Impacts

### a. Trip Generation, Distribution, and Traffic Assignment

Trip generation is an estimate of the total trip activity (vehicular, transit, and pedestrian) associated with the proposed MOB, which is in turn used to estimate the peak hourly flows imposing the highest traffic loading conditions on the surrounding street system. The trip generation characteristics are a function of various measurable parameters, including building size, hours of operation, and location relative to medical care consumers. When estimating trip generation characteristics for the proposed project the specialty mix of the physicians occupying the building is the largest variable involved. Two factors have contributed to the basis for estimating trip generation characteristics:

1) A working knowledge of the expected MOB building occupancy by medical specialties. This data is available because approximately 100 of the 125 intended doctor occupants of the MOB project have signed written commitments to this effect.

2) A substantial portion of the "committed" future medical occupants of the MOB projects have current ongoing medical practices in the San Francisco, and many offices were available for the conduction of a transportation and parking survey.

The MOB user survey included the collection of patient, employee and doctor travel and parking information from a total of 94 doctors and 123 employees. These 94 doctors represent a sample of 75% of the 125 intended MOB doctors. Similarly, the patient survey collected a total of 876 patient responses from a reported universe of 4,198 patients for an overall patient sample of approximately 21%. The survey questionnaire appears in Figure A-3, page 141.[1]

The results of the various survey components are described and analyzed in detail in Appendix A - Transportation, page 125. These results were used to develop a trip generation estimate for the project. Table 8 presents a summary of applicable trip generation criteria and the trip generation rates which were developed. Note that "low, medium, and high" refer to the 3 categories of doctors classified according to their patient volume characteristics. For example, the "low" category includes doctors whose practice specialties generate average patient volumes of 2.3 patients per day, compared with average daily patient volumes of 8.7 and 17.1 for the medium and high categories, respectively.

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[1] All figures with the prefix A- are found in Appendix A - Transportation.

The daily trip generation data presented in Table 8 and the assumed doctor population of the MOB are translated into a daily and peak hour vehicle trips forecast in Table 9, page 75.

TABLE 8. SUMMARY OF DAILY TRIP GENERATION RATES - MOB OCCUPANTS

| Person Trip Generation (By Volume Speciality) | Two Way Average Daily (Person Trips/Doctor) Patients | Doctors | Office Employees | Total |
|---|---|---|---|---|
| Low | 4.6 | 2.0 | 2.6 | 9.2 |
| Medium | 17.4 | 2.0 | 2.6 | 22.0 |
| High | 34.2 | 2.0 | 2.6 | 38.8 |
| MODAL SPLIT | | | | |
| Percent Transit | 22 | -- | 20 | 18 |
| Percent Vehicles | 69 | 100 | 75 | 75 |
| Percent Other | 9 | -- | 5 | 7 |
| VEHICLE TRIP GENERATION (ADT - 2 WAY) | | | | |
| Low | 3.2 | 2.0 | 2.0 | 7.2 |
| Medium | 12.0 | 2.0 | 2.0 | 16.0 |
| High | 23.6 | 2.0 | 2.0 | 27.6 |

*Average Daily Trip

Source: JDDA.

The MOB user survey was also designed to obtain travel behavior information, such as point of origin, mode of travel, and time of travel. This data was used to estimate the direction of approach or trip distribution of travelers to and from the proposed MOB, and the probable routes that these travelers would take. The analysis which supports these estimates is described in Appendix A, Transportation, page 125.

## Traffic Impacts

The additional 2-way vehicle trips that would be generated by the proposed MOB are estimated at 3,000 per day. An assignment of this traffic increase, which would be added to the traffic entering and leaving the area of the proposed MOB, was made to the surrounding streets. A summary of these assignments, comparing existing average 2-way daily traffic with traffic which would be added by the proposed MOB, is presented in Table 10, page 76. The most severe traffic volume impact would occur in the immediate MOB vicinity on Webster Street, between Clay and California Streets.

These volume increases are evaluated in the context of existing capacity utilizations of the 14 intersections in the MOB area in Table 11. With the exception of the intersection at California and Fillmore Streets, all prevailing service levels would be maintained with the development of the project. The California and Fillmore intersection would experience a 2% increase in capacity utilization during the morning peak hour. This 2% increase would drop the California and Fillmore intersection from a C level of service to a D level of service.[1] The remaining intersections in the study area will increase percent utilization of capacity during peak periods, however, they will remain at the A level of service.[1]

## Parking Impacts

There is little or no on- or off-street parking capacity in the Pacific Medical Center area. Therefore, it is necessary for the parking demand generated by the MOB to be accommodated by its own off-street facilities. Section 151 of the San Francisco Planning Code requires medical offices and outpatient clinics to provide

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[1] Level A - Free flow,
Level B - Stable flow, with operating speeds beginning to be restricted by traffic conditions.
Level C - Stable flow, but speed and maneuverability controlled by high volume of traffic.
Level D - Approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions.
For a more detailed description of traffic service levels, see Transportation Appendix, page 133.

TABLE 9. SUMMARY OF DAILY AND PEAK PERIODS MOB RELATED VEHICLE TRIPS

| VEHICLE TRIPS Generation Basis | Generation Parameter | 2 WAY ADT | | TRIPS | | | |
|---|---|---|---|---|---|---|---|
| | | | | 8:00 to 9:00 AM AM PEAK HOUR | | 4:30 to 5:30 PM PM PEAK HOUR | |
| | | Trips/Doctor | Trips | IN | OUT | IN | OUT |
| A - Patients (by speciality) | | | | * | * | * | * |
| Low Volume | 36 doctors | 3.2 | 115 | 3.0% | 1.0% | 11.4% | 16.5% |
| Medium Volume | 61 doctors | 12.0 | 735 | 3.0% | 1.0% | 11.4% | 16.5% |
| High Volume | 28 doctors | 23.6 | 660 | 3.0% | 1.0% | 11.4% | 16.5% |
| SUB | 125 doctors | 12.1 | 1510 | 25 | 5 | 85 | 125 |
| B - Physicians & Employees | 125 doctors | 4.0 | 500 | 155 | 5 | 10 | 160 |
| C - Lab, Pharmacy & X-Ray | 11.25 TSF | 43.0 | 490 | 15 | 15 | 30 | 30 |
| D - Business Function (Medical Salesman, Building Repairs, Deliveries, etc.) | 125 doctors | 4.0 | 500 | 25 | 25 | 5 | 5 |
| TOTAL | N.A. | N.A. | 3000 | 220 | 50 | 130 | 320 |

*Percent of one way ADT.

Source: JDDA

TABLE 10. SUMMARY OF DAILY TRAFFIC IMPACTS

| Street | Street Section Delimiters | Existing Average Two Way Daily Traffic | Added Projected Related Two Way Daily Traffic | Percent Increase |
|---|---|---|---|---|
| WASHINGTON | STEINER | | | |
| | FILLMORE | 1600 | 30 | 2 |
| | WEBSTER | 1600 | 30 | 2 |
| | BUCHANAN | 1600 | 50 | 3 |
| | LAGUNA | 1600 | 55 | 3 |
| | OCTAVIA | 1600 | 50 | 3 |
| CLAY | STEINER | | | |
| | FILLMORE | 2800 | 65 | 3 |
| | WEBSTER | 2800 | 60 | 2 |
| | BUCHANAN | N.A. | -- | -- |
| | LAGUNA | 1000 | -- | -- |
| SACRAMENTO | STEINER | | | |
| | FILLMORE | 5600 | 140 | 3 |
| | WEBSTER | 5600 | 350 | 6 |
| | BUCHANAN | 5600 | 650 | 12 |
| | LAGUNA | 5600 | 170 | 3 |
| | OCTAVIA | 5600 | 110 | 2 |
| CALIFORNIA | STEINER | | | |
| | FILLMORE | 12700 | 390 | 3 |
| | WEBSTER | 12700 | 390 | 3 |
| | BUCHANAN | 12700 | 210 | 2 |
| | LAGUNA | 12700 | 420 | 3 |
| | OCTAVIA | 12700 | 420 | 3 |
| FILLMORE | JACKSON | | | |
| | WASHINGTON | 7200 | 70 | 1 |
| | CLAY | 7200 | 70 | 1 |
| | SACRAMENTO | 7200 | 75 | 1 |
| | CALIFORNIA | 7200 | 135 | 2 |
| | PINE | 7200 | 135 | 2 |

(Continued, next page)

TABLE 10 (Continued)
Summary of Daily Traffic Impacts

| Street | Street Section Delimiters | Existing Average Two Way Daily Traffic | Added Projected Related Two Way Daily Traffic | Percent Increase |
|---|---|---|---|---|
| WEBSTER | JACKSON | | | |
| | | 5400 | 260 | 5 |
| | WASHINGTON | | | |
| | | 5400 | 340 | 6 |
| | CLAY | | | |
| | | 5400 | 1500 | 28 |
| | SACRAMENTO | | | |
| | | 5400 | 1600 | 29 |
| | CALIFORNIA | | | |
| | | 5400 | 1000 | 19 |
| | PINE | | | |
| BUCHANAN | JACKSON | | | |
| | | 2700 | 60 | 2 |
| | WASHINGTON | | | |
| | | 2700 | 60 | 2 |
| | CLAY | | | |
| | | 2700 | 60 | 2 |
| | SACRAMENTO | | | |
| | | 2700 | 420 | 16 |
| | CALIFORNIA | | | |
| | | 2700 | 210 | 8 |
| | PINE | | | |
| LAGUNA | JACKSON | | | |
| | | 4600 | 15 | -- |
| | WASHINGTON | | | |
| | | 4600 | 20 | -- |
| | CLAY | | | |
| | | 4600 | 20 | -- |
| | SACRAMENTO | | | |
| | | 4600 | 40 | 1 |
| | CALIFORNIA | | | |
| | | 4600 | 40 | 1 |
| | PINE | | | |

## TABLE 11. COMPARISON OF EXISTING AND FUTURE PEAK HOUR CAPACITY UTILIZATIONS

| Location | A.M. PEAK HOUR | | P.M. PEAK HOUR | |
|---|---|---|---|---|
| | % of Capacity | Level of Service | % of Capacity | Level of Service |
| Fillmore & California | 83/85 | C/D | 68/72 | A/A |
| Fillmore & Sacramento | 56/58 | A/A | 65/69 | A/A |
| Fillmore & Clay | 38/39 | A/A | 43/44 | A/A |
| Fillmore & Washington | 32/32 | A/A | 34/35 | A/A |
| Webster & California | 63/68 | A/A | 52/63 | A/A |
| Webster & Sacramento | 40/53 | A/A | 52/74 | A/A |
| Webster & Clay | 26/29 | A/A | 31/34 | A/A |
| Webster & Washington | 30/32 | A/A | 25/28 | A/A |
| Buchanan & California | 60/61 | A/A | 42/49 | A/A |
| Buchanan & Sacramento | 49/51 | A/A | 40/45 | A/A |
| Buchanan & Clay | 13/13 | A/A | 10/10 | A/A |
| Buchanan & Washington | 29/29 | A/A | 17/18 | A/A |
| Laguna & Sacramento | 42/42 | A/A | 46/46 | A/A |
| Laguna & Washington | 35/35 | A/A | 28/29 | A/A |

Legend:

83/85 - % of Capacity (Existing/Existing plus MOB project)

C/D - Level of Service (Existing/Existing plus MOB project)
For definitions of levels of service, see Appendix A, page 133.

1 parking space for each 300 square feet of occupied floor area. Applying this 1:300 ratio to the total 111,804 square feet of occupied floor area available in the MOB (see Chapter II, Project Description, page 5) results within a Planning Code parking requirement of 373 spaces for the MOB.

The parking space standards provided in the Planning Code are approximations based on historical averages and do not necessarily represent the actual parking demand which would be generated by a specific project at a specific location. Therefore, a detailed parking analysis was performed for the MOB to more accurately estimate its specific parking requirements based on the characteristics of its user population, i.e., doctor, employees, and patients. Based on this analysis, the estimated peak hour concurrent employee and patient parking demand is 210 spaces, occurring at 2:00 p.m. This concurrent parking demand plus the 125 spaces reserved for the physicians gives a total maximum parking demand estimate for the MOB of 335 spaces. The MOB parking facility is designed to provide 288 parking spaces. This leaves an overall MOB parking deficit of 47 spaces (335 - 288 = 47). However, the original estimate of parking demand, 335 spaces, may be high for reasons discussed in the following paragraphs. In addition, 2 on-street parking spaces would be eliminated in order to provide access to the facility.

Oren L. Reinbolt, Director of Plant and Systems[1] and Frederick C. Meyer, Executive Vice President[2] of PMC have stated that 38 physicians, currently occupying approximately 17,100 square feet of medical offices in PMC facilities, would move from these quarters into the proposed MOB. Only 4 physicians new to the PMC campus will move into 2,550 square feet of space vacated by the 38 physicians. Two-thirds of the remaining 14,600 square feet of space would be used to alleviate crowded office conditions in the general support functions of the PMC, and would be reoccupied by 65 administrative personnel who already work at the PMC campus. The remaining 4,800 square feet of space would be allocated to

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[1] Oren L. Reinbolt, Director, Plant and Systems PMC, written communication 13 December 1978.

[2] Frederick C. Meyer, Executive Vice President PMC, written communication 14 February 1979.

32 new support personnel. The effective result would be a reduction in transportation and parking impacts created by the MOB because these 34 (38 vacating physicians minus 4 new physicians) physicians, their employees, and their patients are already in the area and have been included and accounted for in the existing condition section of the transportation analysis. Assuming 34 of these doctors, their employees and patients will be able to park in the same location as they are presently parking, a net parking demand reduction of 50 spaces will occur.

Applying the PMC/MOB transfer assumption to estimated parking demand the parking supply provided by the MOB would be 3 spaces more than the MOB generated parking demand (288 - 285 = 3 spaces).

### Preferential Parking

Preferential parking has been approved by the Board of Supervisors for the Pacific Heights neighborhood bordered on the east by Van Ness Avenue, on the west by Presidio Avenue and on the north and south by Union and Bush Streets, respectively. All of the MOB study area, as shown in Figure 11, page 38, is included in the preferential parking area. Although preferential parking has been approved, it has not yet been implemented. The Department of Public Works cannot implement the preferential parking in this fiscal year unless supplemental funds are appropriated. If the supplemental appropriation is not approved, then preferential parking will not be implemented until the next fiscal year, beginning July 1, 1980.[1]

Once preferential parking is implemented in the neighborhood, on-street parking availability should improve for the neighborhood residents. Residents, for a fee of 10 dollars a year, will receive stickers for their cars, allowing them to park as long as they wish. All other cars will be ticketed if they are parked longer than 2 hours in any one location between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. It will no longer be possible for PMC employees to use on-street parking due to the 2 hours limit. They will have to use off-street parking facilities or ride public transit as an alternative to driving.

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[1] Norman Bray, Transportation Division, San Francisco Deprartment of Public Works, phone conversation, 15 November 1979.

## Transit Impacts

The total number of daily transit trips which would be generated by the MOB is 546. Of these 546 transit trips, 481 would be generated by patients and 65 by employees. It is asumed that no physicians would use transit. The peak loading of patient transit trips would occur during 2 to 4 p.m. It is estimated that 360 of the total 546 daily transit trips generated by the MOB would occur during the off peak hours of 10:00 a.m. to 4:00 p.m. The load factors for this period on the 5 bus lines serving the MOB study area indicate that these 360 trips could be accommodated without exceeding the load factor standard of 1.5.

Of the remaining 186 transit trips generated by the MOB, it is estimated that 93 would occur in each of the peak hours, morning and evening. Although the numbers of MOB generated peak period trips which would be added to the 5 bus lines serving the project area are small, these lines are currently operating at the threshold load factor level of 1.5 in areas which would be affected by these additional trips. In order to not exceed the 1.5 load factor standard established by Muni, it would be necessary to increase headway frequencies of these five lines during the peak periods. If headway frequencies are not increased, this standard would be exceeded and the quality of service would be reduced.

## Pedestrian Impacts

A total of 210 daily pedestrian trips would be generated by the proposed MOB. These pedestrian trips would present no capacity problems at traffic intersections or on the existing sidewalks. Appendix A, page 125, give the breakdown of these trips.

## G. NOISE[1]

### 1. Construction Noise

Construction noise in San Francisco is regulated by the Noise Ordinance #274-72, Regulation of Noise, adopted 10 August 1973. The ordinance, which is enforced on a complaint basis, requires that all powered construction equipment, except impact tools and equipment, not emit more than 80 dBA when measured at a distance of 100 feet. Impact tools and equipment include pavement breakers, jackhammers and piledrivers, and these must have both intakes and exhausts mufflied to the satisfaction of the Director of Public Works. This project would require no piledrivers but would probably use impact torque wrenches and possibly jackhammers. They would emit 75 to 95 dBA at 50 feet.

Construction of the proposed Medical Office Building would take place during a 2 year period. The hours of construction would be 8:00 a.m. to 4:30 p.m. on weekdays. The construction of the building would encompass the following phases: site excavation; foundation construction; and erection of the building. Because of the variation in type of equipment used, location of the equipment on the site and percentage of time operating in the noisy mode, it is difficult to predict the noise level for a specific location, activity and time period. Therefore, the following discussion presents the worst case analysis of the noise impacts associated with the construction of the Medical Office Building during each of the above construction phases.

During site excavation bulldozers, graders, and front end loaders would be expected on site. These pieces of equipment would generate from 70 to 86 dBA at 50 feet. Eighty-six dBA at 50 feet is equivalent to 80 dBA at 100 feet, and is the maximum that would be allowed by the Noise Ordinance. During foundation construction, concrete pumpers, power saws, etc., would be the major noise sources. Noise levels during this phase would range from 70 to 86 dBA at 50 feet. During building erection, equipment on-site would typically be a crane, air compressors, concrete pumpers, impact torque wrenches, saws, and engine generators. These pieces of equipment would emit from 75 to 95 dBA at 50 feet. The impact wrenches would emit the highest noise level expected at the job site. These tools have not in the past been regulated by the Director of the Department of Public Works.

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[1] See Appendix B, page 185, for background information which will aid in the understanding of noise elements of this EIR.

The Stanford Building is the closest building to the construction site. The offices on the western side of this building would be as close as 50 feet to construction equipment. Noise levels outside the building under worst case, i.e, during the operation of impact wrenches, would, therefore, be anticipated to reach up to 95 dBA. If the windows of this building were partially closed, yielding about 15 dBA of noise reduction, maximum levels in the offices would be 80 dBA. If the windows were closed (the most likely situation during these periods of maximum noise generation) a noise reduction of 25 dBA would be expected and noise levels would be a maximum of 70 dBA inside. At a level of 70 dBA it would be difficult to carry on a phone conversation, interview patients, or concentrate.

During those periods when impact wrenches were not in use, the noise levels would be 9 dBA less outside the building (86 dBA) and would cause maximum noise levels of about 70 dBA with the windows partially closed and 60 dBA with the windows closed. At this level, annoyance would be expected, but it would be possible to conduct business with occasional brief interruptions. These levels would be expected to occur only during construction at the eastern boundary of the site. As construction takes place at other parts of the site noise levels at the Stanford Building would drop accordingly.

Safety fences erected around a construction site are typically made of plywood. If properly designed, they reduce construction noise levels by up to 15 dBA on the sidewalk. Therefore, noise levels on the sidewalks surrounding the site would be 80 dBA maximum. This noise would be annoying and would interfere with conversation but would occur only as people pass the site. The safety fence would also have the advantage of shielding the surrounding area from ground-based noise sources--air compressors, crane engines etc.

The land use bordering the site on the opposite sides of Sacramento, Clay and Webster Streets are 54, 51 and 48 feet from the construction site, respectively.

The School of Dentistry on Webster Street has fixed windows which yield a noise reduction of approximately 30 dBA. Noise levels during construction would be expected to reach a maximum of 92 dBA outside the building and, therefore, 62 dBA inside the building. These maximum noise levels would be on the order to 5 dBA higher than existing maximum noise levels, and at a level of 62 dBA would cause distraction and some annoyance.

The Health Science Library, located at the intersection of Sacramento and Webster Streets, has operable windows which are opened only on hot days.[1] Present maximum noise levels outside the library reach 90 dBA when buses pass. The maximum noise level which would be anticipated at any time during MOB construction would occur during the use of impact wrenches and would be a level of about 90 dBA. However, during the days of maximum construction noise generation, this level would be reached more often than at present.

The residences on Webster Street and Clay Street to the northwest of the project do not have fixed windows and rely on open windows for ventilation. The closest residences are 160 feet from the site. Average residence levels are 50 dBA. Maximum noise levels would reach 86 dBA at these locations, resulting in interior noise levels with windows partially open of 71 dBA or with windows closed of 61 dBA. During period of maximum noise generation, annoyance and distraction would be anticipated for those residences on Webster Street between California and Sacramento and on Clay Stret between Webster and Fillmore.

## 2. Operational Noise

Operation of the MOB after construction would increase noise levels in the vicinity in 2 ways: an increase in overall traffic noise due to increased traffic generated by the project, and an increase in noise levels due to noise associated with the operation of the MOB, specifically noise generated by building mechanical equipment.

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[1] David Griffin, PMC Library Employee, telephone conversation, 6 April 1979.

An analysis was performed of the potential for noise increase associated with the projected increase in traffic which would be generated by the MOB. The analysis indicates that the amount of traffic which would be generated by the building during any hour of the day would cause traffic noise levels to increase by less than 1 dBA along any of the streets in the vicinity of the building. A 1 dBA increase in environmental noise is undetectable by the human ear.[1]

The specific mechanical equipment which would be used at the medical office building has not yet been chosen; however, it is anticipated that there would be garage exhaust fans and roof-mounted building exhaust fans. The San Francisco Noise Ordinance sets limits on the noise that mechanical equipment at the proposed MOB would be permitted to emit. The Noise Ordinance limits the noise from the mechanical equipment to 50 dBA, between 10 p.m. and 7 a.m., and 55 dBA between 7 a.m. and 10 p.m., measured at the nearest residential receiver. The background noise level during the morning rush hour was measured to be 50 dBA. The nighttime background noise level would be 5 to 10 dBA below this. If the mechanical equipment would be operated at night at the allowable noise limit, it would be audible inside the nearest residences through open windows at a noise level of about 35 dBA. This level of noise would be detectible but would not interfere with sleep. If the equipment were operated during the hours of 7 a.m. to 10 p.m. at the permitted level, it would be audible during lulls in traffic. If the equipment were designed to meet the nighttime noise limit of 50 dBA, then it would be barely audible at the nearest residence during the day.

### 3. Compatibility of the Medical Office Building with the Existing Noise Levels

The City and County of San Francisco has adopted guidelines for determining the compatibility of various land uses with different noise environments.[2] The guidelines state that a medical office is an acceptable land use, with no special noise reduction requirements, in noise environments with a maximum Ldn of 70 dB. The present maximum noise exposure of the site is 70 Ldn, due to traffic noise emanating from Sacramento Street. Peak noise levels on this side of the street reach 85 dBA during bus passbys. The proposed MOB would have climate control but would also have operable windows. If the windows on Sacramento Street were partially closed, a noise reduction of about 15 dBA would be achieved, resulting in an interior noise environment of Ldn 55 with peak noise levels of up to 70 dBA. If the windows were closed completely, a noise reduction of 25 dBA or greater (depending on the type of glass used) would be expected. This would mean that the Ldn would be 45 dBA with peak noise levels of up to 60 dBA. Offices on the Webster Street side of the building would be exposed to maximum noise levels ranging from 85 dBA for the offices nearest Sacramento Street to 70 dBA for the offices farthest from Sacramento Street. Interior noise levels with the windows partially open would reach a maximum level of from 60 dBA to 70 dBA. With the windows completely closed maximum noise levels would range from 35 to 45 dBA. This is at a level consistent with average business office levels.

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[1] Charles M. Salter Associates, Inc., Pan-Med Draft EIR Noise Report, 8 April 1979.

[2] San Francisco Department of City Planning, "Plan for Transportation Noise Control." An element of the Comprehensive Plan 1974.

## H. CLIMATE AND AIR QUALITY

The project would affect the microclimate of the area by modifying the local wind and sunshine/shade patterns. The proposed medical office building would be rectangular in shape with its wide face to the prevailing wind flow. Such a building would exhibit wind accelerations in front of the building and along its sides.[1] The proposed building would be downwind from an existing 6-story School of Dentistry building and a 2-story garage across Webster Street. The presence of these two structures would reduce the proposed building's exposure to westerly winds. The proposed building would extend 36 feet above the School of Dentistry building at the Sacramento/Webster Streets intersection, so that wind changes at this intersection would be ±5%. The north end of the proposed building would extend 6 stories above the parking garage across Webster Street; wind accelerations of 10-20% would be expected north of the proposed building, affecting the existing parking lot. These increases in wind velocity may be noticed by some individuals as they would cause cool conditions to be more frequent. Winds elsewhere within the medical campus would not be affected by the proposed building. The plaza proposed east of the MOB would be sheltered from wind and would have a southern exposure. During the highest use period, noon hour, the plaza would not be shaded but protected from wind, which would make it a comfortable lounging area.

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[1] A.D. Penwarden and A.F.E. Wise, Wind Environment Around Buildings. Building Research Establishment. 1975.

Shadows cast by the proposed building would affect Webster Street during the morning hours, the parking lot north of the building site midday, and the hospital site in the afternoon, as shown in Figures 16 and 17, page 68 and 69. The additional shadows and higher winds near the building would combine to make uncomfortable outdoor conditions more frequent. The maximum impact would occur at the parking lot north of the building site, where both wind and shadows would increase.

### 1. Construction Impacts

Construction activities would generate pollutants in the vicinity of the project. Trucks and equipment would all release exhausts that would affect neighboring residences during construction hours. Earthmoving, grading, site excavation, and fire insulation of the steel frame would generate dust and suspended particulates. Carried eastward several blocks by the prevailing winds, these pollutants would affect both the medical complex and residential areas to the east, causing potential annoyance to the residents of the area.

### 2. Carbon Monoxide

#### Local Effects

Direct atmospheric emissions from the project would be from the combustion of natural gas for water and space heating. Natural gas is a relatively clean-burning fuel, therefore no visible plume would occur. Exhaust gases would be emitted at the rooftop where turbulence would dilute the plume before it reached ground level or the windows of neighboring buildings.

Project-related automobile traffic would affect carbon monoxide levels near the site. Carbon monoxide (CO) levels have been predicted for intersections near the proposed site under worst case traffic (peak volumes) and meteorological conditions (light winds, stable atmosphere). Using a conservation model developed by the Bay Area Air Quality Management District,[1] peak 1- and 8-hour curbside CO levels have been calculated based on existing and projected traffic conditions. These predicted levels and the applicable federal and state standards are shown in Table 12.

TABLE 12. CURBSIDE CARBON MONOXIDE CONCENTRATIONS UNDER WORST CASE TRAFFIC AND METEOROLOGY ASSUMPTIONS

| | Carbon Monoxide Concentration (parts per million) | | | |
|---|---|---|---|---|
| | Peak 1-Hour | | Peak 8-Hours | |
| Intersection | Existing | With Project | Existing | With Project |
| Clay/Webster | 1.9 | 2.0 | 0.5 | 0.6 |
| California/Webster | 4.4 | 5.0 | 1.2 | 1.3 |
| California/ Fillmore | 4.8 | 5.0 | 1.3 | 1.3 |
| Sacramento/Buchanan | 1.9 | 2.2 | 0.5 | 0.6 |
| Washington/Webster | 1.5 | 1.6 | 0.5 | 0.5 |
| Washington/Buchanan | 0.8 | 0.9 | 0.3 | 0.3 |
| Federal Standards | 35.0 | | 9.0 | |
| State Standards | 40.0 | | -- | |

Table 12 shows that under worst case conditions, CO levels in the vicinity of the project would not exceed federal or state standards. As these are curbside values, concentrations at greater distances from the roadway would be less.

Project traffic would increase CO levels during the peak traffic hours by from 0.1 to 0.3 parts per million in the vicinity of the project, and increase 8-hour peak concentrations by about 0.1 parts per million.

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[1] Bay Area Air Quality Management District (formerly Air Pollution Control District), Guidelines for the Air Quality Impact Analysis of Projects.

Within the site itself, the underground parking garage beneath the medical office building would have a potential for carbon monoxide problems. The parking garage would be mechanically ventilated, with a variable volume ventilation system that would be controlled by carbon monoxide detectors. The system would increase ventilation whenever a predetermined carbon monoxide level is reached.

The garages would be vented to the atmosphere at the northeast and southeast corners of the medical office building. The stream of air would be vented upward to avoid pedestrian areas. Depending on the final location of these vents, the diluted exhaust plume would either be drawn into the wake of the medical office building on the building's east side, or carried away in an easterly direction by the prevailing winds. Garage emissions would be superimposed on impacts from traffic along Sacramento and Buchanan Streets. Quantification of these impacts is not possible due to the complications of the ventilation system and the complex airflow caused by buildings in the area.

## Regional Effects

The regional impacts of the proposed project would be related to the regional increase in Vehicle Miles Travelled (VMT) generated by the proposed MOB. The total VMT associated with the project is estimated at 36,000. The methodology used in making this calculation is discussed in Appendix C, Air Quality Assumptions and Methodology, page 192. The regional emission due to this VMT in 1980 is shown below in Table 13, along with the 1985 estimated emissions for the San Francisco Bay Region.

TABLE 13. PROJECT AND REGIONAL EMISSIONS

| Pollutant | Project Auto Emissions (tons/day) | 1985 Regional Emissions (tons/day)[1] |
|---|---|---|
| Carbon Monoxide | 0.75 | 2,500 |
| Hydrocarbons | 0.09 | 950 |
| Oxides of Nitrogen | 0.12 | 750 |

The above increase in regional emissions would result in a degradation of regional air quality; however, the project's emissions represent an increase of at most 0.01% in regional emissions. A recent study of regional air quality[1] found that photochemical oxidant will be a persistent problem in the future, and that reductions in hydrocarbon and oxides of nitrogen emissions would be necessary to attain the federal standard for photochemical oxidant in the Bay Area. The project would increase emissions of these pollutants, making attainment of the standard for oxidant more difficult, but the total increase would not be statistically significant in a regional context.

## I. FISCAL

### 1. Construction and Permanent Employment

The anticipated construction costs of about $12 million for the proposed project over a 2 year construction period would generate an estimated 89 person-years of employment for a total labor cost of about $6,513,000.[2] When in operation, the project is expected to provide 299 permanent jobs (125 doctors, 163 staff, 11 other employees). However, 38 doctors and approximately 50 staff are already located at the PMC, and most of the remaining doctors and staff would simply be moving from established facilities in other locations in San Francisco to the MOB.

### 2. Municipal Revenues

Municipal tax revenues generated by the proposed project would include payroll and property taxes. During construction, the City could expect approximately $71,650 from a labor cost of $6,513,000.[3] The net increase in payroll taxes for permanent jobs would be minimal since it is expected few new jobs would be generated by the proposed projects.

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[1] Association of Bay Area Governments, Environmental Management Plan, June 1978.

[2] Paul Barnhart, Kaplan/McLaughlin/Diaz, telephone conversation, 13 March 1979.

[3] Based on a payroll tax of 1.1% (Tax Collector, Business Tax Division, City of San Francisco).

The assessed land value of that portion of Lot 1, Assesors Block 628, which is the proposed site of the MOB is approximately $81,892.[1] Given PMC's status as a not-for-profit corporation and the present use of the site (vacant), PMC does not pay any property taxes on the land.[2] Subsequent to the rental of the site by PMC to Pan-Med, Ltd. and the construction of the MOB, PMC and Pan-Med would be required to pay property taxes on the land and improvements, respectively.

Using the current assessed value of the proposed MOB site, PMC would pay an annual property tax of $4,144.[3] Assuming that the assessed value of the MOB would be 25% of the development cost,[4] currently estimated at $12 million, Pan-Med, Ltd. would pay an annual tax of $151,800 on the MOB building. The increased tax payments amount to $147,656. During construction of the MOB, PMC and Pan-Med, Ltd., would pay portions of these property taxes based on the value of the construction work in progress.[5]

## J. COMMUNITY SERVICES

Existing water capacity would be adequate for the domestic and fire needs of the proposed project.[6]

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[1] The total assess to land value of Lot 1, Assessors Block 628 is $245,675 (San Francisco Assessor's Office). The proposed MOB site occupies approximately 1/3 of Lot 1.

[2] Russell Pearson, Controller, PMC, telephone conversation, 24 April 1979.

[3] The current property tax rate in San Francisco is $5.06 per $100 of assessed value. As provided by Article XIIIA of the California Constitution, $4.00 per $100 of assessed value is equivalent to one percent (1%) of the full cash value, and $1.06 per $100 of assessed value covers the interest and redemption charges on bonded indebtedness approved prior to the effective date of this article.

[4] Robert Kennedy, Chief Appraiser, San Francisco Assessor's Office, telephone communication, 25 April 1979.

[5] Robert Kennedy, Chief Appraiser, San Francisco Assessor's Office, telephone conversation, 25 April 1979.

[6] Ray Quan, San Francisco Water Department, telephone conversation, 23 February 1979.

Existing personnel and equipment would be adequate to provide fire and police service to this project. In addition, the San Francisco Water Department has stated there is adequate water to meet the fire requirements.[1]

Any new development which is open to the public is anticipated to increase the number of service calls for police service. The increase for the proposed project would be within the service capacity of existing police manpower.[2]

Pacific Telephone has stated that it would be able to provide service to the proposed project with existing facilities. All conduit sizes and terminal locatons would determine when working drawings would be developed for the proposed project.[3]

There is adequate capacity to provide sewer and flood control to the proposed project.[4]

It is estimated that the proposed project would generate an average of 2.8 lbs/capacita/day[5] of solid waste. Sunset Scavengers has the existing capacity to service this project.[6] PMC has an existing disposal service for hazardous waste materials that Pan-Med would be permitted to utilize. This service meets the city code for hazardous waste disposal.[7]

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[1] Robert E. Rose, Chief, Division of Planning and Research, San Francisco Fire Department, written communication, 20 February 1979.

[2] Officer Paul Liebert, Field Operations Bureau, City of San Francisco Police Department, telephone conversation, 28 March 1979.

[3] D. Gallagher, Engineering Manager, Pacific Telephone Company, telephone conversation, 16 February 1979.

[4] R.T. Cockburn, Southeast Water Pollution Control Plant, telephone conversation, 21 March 1979.

[5] California Solid Waste Management Board, Bulletin 2: Solid Waste Generation Factors, 1974, page 3.

[6] Louis Lercari, Sunset Scavenger Company, telephone conversation, 29 March 1979.

[7] Martin Brotman, M.D., President, PAN-MED LTD., written communicaton 29 October, 1979

## K. SEISMICITY

The proposed MOB would conform to the San Francisco Building Code and all seismic safety codes specific to medical office building facilities. It would therefore incorporate the required design elements for minimizing seismic hazards. However, no structure, even if it conforms to the Code, would be 100% safe during a severe earthquake.

## L. HYDROLOGY AND DRAINAGE

As designed, the proposed project would result in almost complete site coverage. A spokesman for the Southeast Water Pollution Control Plant has stated that existing facilities in the project area would have adequate capacity for any additional increase in runoff from the project site.[1]

## M. VEGETATION AND WILDLIFE

The proposed project would destroy all vegetation and destruction or removal of all wildlife on the site. The planting of street trees in compliance with City law and the landscaped terraced on the west facade and the first floor plazas located on the west and east sides of the building would provide habitat areas in the project area for wildlife which is tolerant to human presence.

## N. ENERGY

Energy needs for the MOB would be supplied by electricity and natural gas. Electricity would be used for space cooling, lighting, building ventilation, parking garage exhaust, and operating computer, radiological, and laboratory equipment.

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[1] R.T. Cockburn, Southeast Water Pollution Control Plant, telephone conversation, 21 March 1979.

The connected electrical load is estimated to be approximately 2,300 kilowatts.[1] Estimated monthly consumption for all electrical needs would be approximately 550,000 kilowatt hours (kwh) or 4.2 kwh per square foot of total floor area (total floor area is 131,000 square feet).[2]

Anticipated daily and annual peak electrical load distribution curves are found in Figures 18-A and 18-B. These curves are based on an interior cooling temperature of 78°F. The daily peak electrical distribution curve, Figure 18-A, shows that the electrical demand would rise after 7:00 a.m., when the cooling units are turned on prior to the commencement of the working day. The demand would have peaked at 1800 kilowatts by 3:00 p.m., the hottest time of the day and the peak period for patient visits. By 9:00 p.m. the electrical demand would drop-off sharply when the janitorial staff completes its work and the building is secured for the night. The annual peak electrical distribution curve, Figure 18-B, shows that the highest demand for electricity would be between the months of June through October, when space cooling is required.

Natural gas would be used for space and hot water heating. Use of solar energy for space and hot water heating was examined and found not to be cost effective at this time. Estimated average consumption of natural gas per square foot of interior floor space per day would be 43 BTU.[3] Peak estimated daily consumption of natural gas would be 12,300 cubic feet.[4]

Anticipated daily and annual peak natural gas load distribution curves are found in Figures 18-C and 18-D. These curves are based on an interior heating temperature of 68°F. As shown in the peak day curve, Figure 18-C, maximum natural gas

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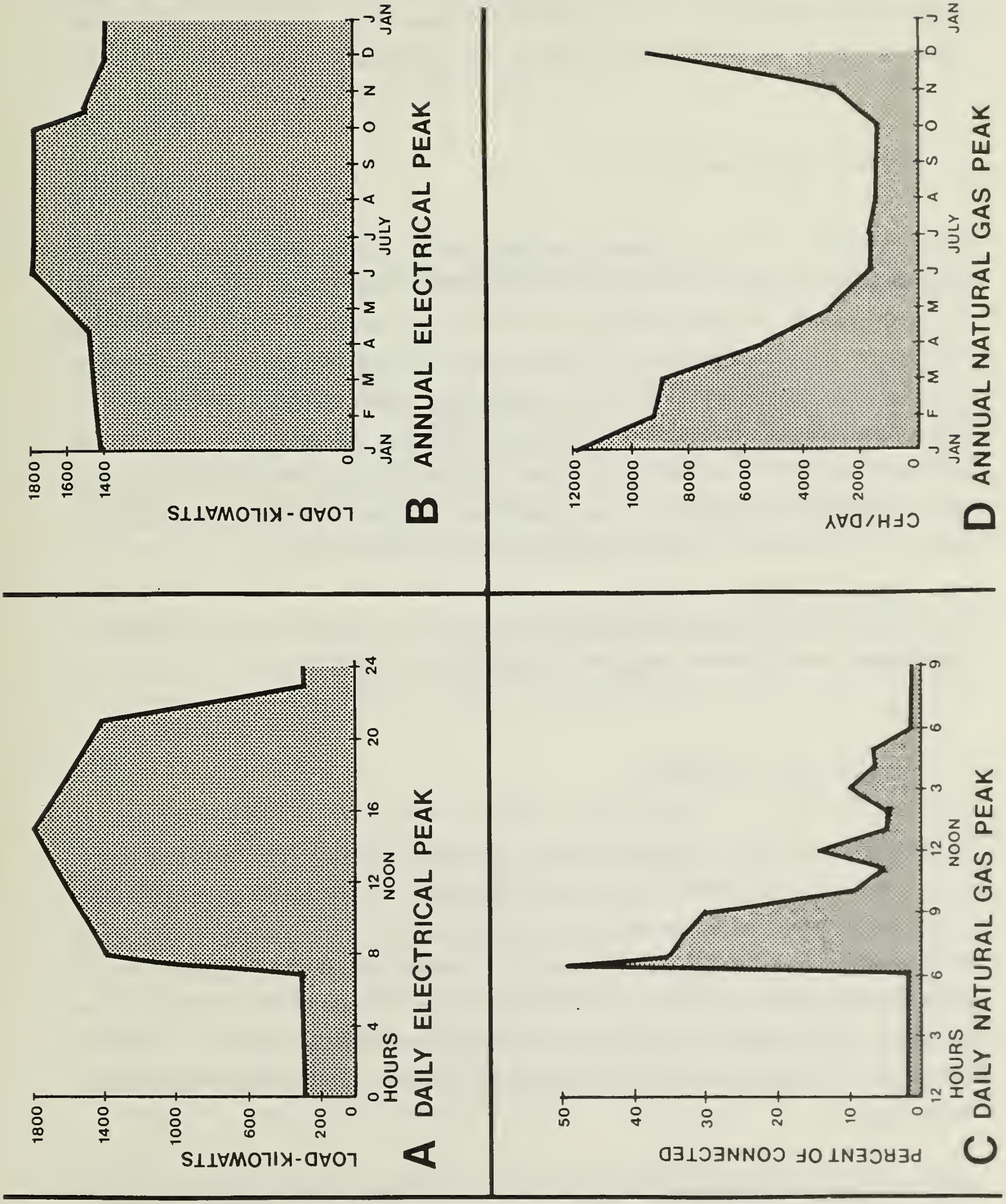
[1] Walter D. Camp, P.E., Syska & Hennessy, San Francisco, telephone conversation, of 9 May 1979.

[2] Ibid. One kwh is 10,239 BTU. This conversion factor incorporates generation and transmission efficiencies as defined in the Energy Conservation Design Manual, October 1977, for new non-residential buildings, California Energy Commission.

[3] Peter H. Johnson, P.E., JYA Consulting Engineers, Inc., San Francisco, written communication of 7 May 1979.

[4] Ibid. One thousand cubic feet of natural gas is equal to approximately 1,050,000 BTUs.



A DAILY ELECTRICAL PEAK

B ANNUAL ELECTRICAL PEAK

C DAILY NATURAL GAS PEAK

D ANNUAL NATURAL GAS PEAK

Figure 18 ANTICIPATED MOB ENERGY LOAD DISTRIBUTION CURVES

consumption would occur from 6:00 to 7:00 a.m. when the MOB interior spaces would be heated prior to the start of the day's operations. Peak annual consumption would be during the month of January, the peak heating month.

## O. GROWTH INDUCING IMPACTS

Implementation of the proposed project would create short-term (2 years) construction jobs which would most likely be filled by Bay Area residents. When in operation, the project would accommodate approximately 125 physicians and would provide permanent jobs for approximately 174 support staff. Most of these physicians and support staff would be moving from established facilities elsewhere in San Francisco to the proposed MOB. Development of the MOB, by relocating additional persons in the vicinity of the Fillmore Street commercial area, would provide additional patrons for the goods and services it offers, thus to some degree encouraging the expansion of these commercial activities.

Development of the project would not require the provision of new utilities and public services which would support additional new development.

## P. COMMUNITY CONCERNS

The Citizen Advisory Committee formed to identify community concerns pertinent to the proposed MOB raised many impact issues. These concerns dealt with the increased noise, litter, traffic, and parking demand caused by the MOB, there were concerns over the effect of increased traffic on ingress and egress of driveways, the safety of the construction site, and the effects of the MOB on solar access, T.V. reception, neighborhood character and visual quality. Citizens questioned the effect of the MOB on property values and the existing land use regulations.

Each of these impact issues is presented in Appendix F, page 222, along with consultant findings and mitigation measures relevant to each.

# CHAPTER V

# IMPACT MITIGATION

## A. VISUAL CHARACTER

The MOB architect has incorporated the following mitigations into the design of the project.

- A stepped-terrace or setback arrangement of the different floor levels of the west face of the proposed MOB to break up its block-long horizontal length into smaller segments or units. These units better relate the MOB to the narrow street facades typical of the nearby Victorian residencs than if the floor levels along its west facade were uniform.

- Projecting window bays along its west facade to provide additional visual relief from the MOB's horizontal lines, and in a contemporary manner, to relate the MOB to the bay window design motifs common to surrounding Victorian structures.

- Terracing the west facade of the MOB to emphasize the third floor roof line, thus forming a transition between the taller, existing PMC facilities and the older smaller structures of the neighborhood.

- Utlizing an architectural style or character to relate the proposed MOB to the older structures of the neighborhood; specifically utilizing small scale exterior design details to create shadow patterns and visual variety, avoiding finish materials with uniform, plain textures and dark colors, and featuring some color highlights in the MOB design.

A terraced design or setback of the northwest corner of the MOB would eliminate its impact on the view of the western horizon which is presently available from Burns Memorial Court. The project sponsors have accepted this mitigation measure in part by the terracing, as shown in Figure 14-C, page 62. They have stated that further modification of the MOB's design to expand this view is not contemplated at this time for the following reasons:

- A further reduction in the size of the MOB would be detrimental to its economic feasibility.

- Compared with the view available when the Cooper and Lane Buildings occupied the project site, the design of the MOB presents an improvement. This can be seen by comparing Figure 14C, page 63 to Figure 15, page 66.

- According to the project architect, increasing the "notch" in the northwest corner of the MOB would compromise the overall integrity of its architectural design.

## B. TRANSPORTATION

### 1. Construction Mitigation Measures

The provision of free remote-site parking served by a shuttle bus for MOB construction workers would reduce the number of workers attempting to park in the neighborhood. The project sponsor has agreed to this mitigation measure, and is investigating the availability and cost of remote site parking.

The provision of a covered sidewalk along the Webster and Sacramento Street boundaries of the proposed MOB site would reduce construction impacts on pedestrian traffic along the adjacent sidewalks. The project sponsor has agreed to provide this mitigation measure.

### 2. Operation Mitigation Measures

The most effective mitigation of transportation impacts would be a reduction in the total number of physicians that occupy the MOB. Under the parking impacts section of this report, it was noted that 38 physicians currently occupying medical offices in PMC facilities would move into the proposed MOB. According to an office space reallocation strategy proposed by PMC, only 4 new physicians would move into the vacated quarters. Of the remaining vacated space, 14,600 sq. ft., approximately 2/3 would be used to alleviate overcrowded conditions in the PMC administrative offices by moving in personnel already on campus. The last increment of vacated office space would be used to accommodate new, additional hospital support personnel. This net reduction in the number of MOB physicians would result in an approximately 20% reduction in all traffic and transit impacts associated with the proposed MOB. Documentation for this percent reduction is provided in Appendix A, page 174. PMC has committed itself to the implementation of this office space reallocation strategy.

A related mitigation measure would entail a redistribution of the expected composition of the MOB physician population by type of practice. Such a redistribution would be directed toward attracting a higher number and percent of physicians in the low patient load specialties and lower number of physicians in the high patient load specialties. Since the difference in patient load is as much as seven fold, any efforts in this respect would substantially reduce the forecast traffic, transit and parking impacts of the MOB project. The project sponsor has rejected this mitigation measure stating that it would not allow the MOB to provide the mix of primary care and specialty physicians which is desired by Pan-Med and which is in the long term best interest of PMC.

Another mitigation measure would entail a change in the work schedule, particularly in the patient office hours, of the future physician population of the proposed MOB. As indicated in Appendix A, page 159, the busiest patient visiting hours at the MOB would be between 2:00 p.m. and 4:00 p.m. This is the time when most doctors currently see the most patients in their respective offices. This measure would attempt to shift part of this peak patient load to the morning hours, and would require acceptance by Pan-Med of an office space schedule whereby individual physician suites would commit to specific patient visiting hours. Pan-Med conducted a survey in June 4, 1979, of the 89 physicians who will relocate in the MOB to determine their receptiveness to morning office hours. Sixty-three (63) physicians responded to the survey, with 43 stating that they already have morning office hours, 12 stated they would consider change to some morning hours and 8 responded that they would prefer to continue offering afternoon office hours. These numbers do not reflect a firm commitment; however, they do indicate a favorable response.

Measures to encourage use of public transportation would be an effective element in mitigating parking and traffic impacts. Such measures would include free or partially subsidized transit passes for employees. The survey described in the preceding paragraph also questioned the physicians with regard to employee carpooling. Twenty-six of the 63 physicians stated that their employees would be willing to carpool, 22 responded negatively, and the rest did not comment. According to the survey, if all the employees in the 26 physicians offices did carpool, a reduction in 33 vehicles would be achieved. Pan-Med has agreed to activley encourage all physicians (on an individual basis) to subsidize non-auto travel by their employees (i.e., fast transit passes). Pan-Med does not feel that it is practical to expect doctors to use public transit or carpool due to the amount of their travel during the day, however, Pan-Med has agreed to give a meaningful reduction parking rate to employee carpools of 3 or more persons. Pan-Med has also agreed to collaborate with Presbyterian Hospital on all attempts at off-site parking with shuttle buses and carpooling efforts.

## C. NOISE

### 1. Construction Mitigation Measures

Pan-Med has agreed to install a construction safety fence. Safety fences erected around a construction site are typically made of plywood. If properly designed, they reduce construction noise levels by up to 15 dBA on the sidewalk. Therefore, noise levels on the sidewalks surrounding the site would be 80 dBA maximum. This noise would be annoying and would interfere with conversation but would occur only as people pass the site. The safety fence would also have the advantage of shielding the surrounding area from ground-based noise sources--air compressors, crane engines, etc.

In addition to meeting the requirements of the San Francisco Noise Ordinance, Pan-Med would require the MOB contractor, in so far as possible, to locate noising equipment as near as possible to Sacramento Street. This would be required for 2 reasons: 1) as the site is excavated there would be a barrier effect provided by the side walls of the site, reducing noise levels from construction equipment at the homes, offices, etc., on Sacramento Street which are already exposed to high traffic noise levels; and 2) by locating the equipment near Sacramento Street its noise would be less likely to impact the Stanford Medical Building and homes on Webster Street north of Clay Street.

Pan-Med has agreed to designate an individual to respond to noise complaints during MOB construction and operation to ensure that noise control measures, which Pan-Med agrees to implement, are followed. The noise impacts of the MOB would also be reduced by conducting maintenance operations, which generate exterior noise only during afternoon hours.

## 2. Operation Mitigation Meaures

To insure that mechanical equipment noise does not cause an impact on the community during the nighttime hours, the MOB sponsor has agreed to submit an acoustical report to the City upon completion of mechanical system plans, showing that the system will be designed to emit no more than 45 dBA as measured at the nearest residence on Webster Street.

To minimize the impact of existing noise levels on the proposed MOB, consideration would be given to locating only non-sensitive uses along the Sacramento Street side of the building and along the Webster Street side of the building within 100 feet of Sacramento Street. If these rooms are used as office space with operable windows, it is probable that persons in these offices would close the windows to reduce noise levels inside. In this case it would be reasonable to design the building with fixed windows that would achieve 30 dBA of noise reduction, insuring that the daily Leq[1] would be 40 to 45 and peak levels would be 50 to 55 dBA. This would be considered an acceptable office noise environment. Pan-Med has agreed to further investigate windows to give satisfactory noise reduction.

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[1] Leq is the equivalent steady-state sound level which in a stated period of time would contain the same acoustical energy as the time varying sound level during the same period. (See Appendix B, page 185).

## D. AIR QUALITY

### 1. Construction Mitigation Measures

Watering is the normal method of dust and suspended particulate control on construction sites. The San Francisco Building Code requires that measures be taken to reduce dust and particle generation, specifically watering down demolition materials and soils. An effective watering program (complete coverage twice daily) would reduce emissions by about 50%. Pan-Med has agreed to implement this mitigation measure.

Other potential control measures are listed below. Pan-Med has agreed to implement measures a, b and c.

a. Scheduling of major dust-generating activities for the early morning or other hours when winds are low.

b. Physical covering of storage piles.

c. Using canvas drapes to close in building floors when applying the mineral-base fire insulation to the steel frame.

d. Construction phasing such that major earthmoving and demolition activities occur during late fall, winter and early spring months (when soils has maximum moisture content).

Pan-Med has agreed to incorporate into the construction contract the dust and suspended particulate control measures which it has agreed to implement. Compliance with these measurements by the construction contractor would be monitored by establishing a joint neighborhood-Pan-Med committee.

### 2. Operation Mitigation Measures

The location of parking garage exhausts would determine whether exhaust gases are entrained behind the proposed building or carried away by the prevailing winds. Locating the exhaust vents to the north and south of the building, as opposed to "behind" the building, would insure that exhaust gases would be carried away to the east. At this location, the amplification of the wind by the building would increase dilution of exhaust gases. Pan-Med has agreed to implement this mitigation measure.

## E. ENERGY

The MOB would include the following energy conservation techniques (ECT's). The design of the plumbing system would incorporate flow restrictors which would reduce water heating energy consumption by 50%.[1] In addition, hot water heating would be primarily supplied by waste heat from either the space cooling chilled water system or the space heating system. Back-up heating would be provided by natural gas, and the hot water heating system would be capable of retrofitting with active solar when the rising price of natural gas makes it cost effective. It is not known when this will occur.

The space cooling system would utilize natural ventilation through operable windows, except when the outside temperature exceeds 55°F. Solar heat gains would be reduced by structurally shaded windows located on the south and west sides of the building.

The space heating system would utilize interior plenum waste heat reclaimed from the light distribution system.[2] Passive solar hearing would be provided through windows located on the west side of the MOB. The space heating system would be capable of retrofitting with active solar when the rising price of natural gas makes it cost effective. It is not known when this will occur.

MOB ventilation would use a variable volume system which would reduce electrical consumption. The garage exhaust system would be controlled by a CO monitor which would operate the exhaust fans only when an established CO level is exceeded.

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[1] Peter H. Johnson, JYA Consulting Engineers, Inc., San Francisco, written communication of 7 May 1979.

[2] Light fixtures will be vented and ducted to allow air flow over them and recirculation of air heated by the lights.

## F. COMMUNITY CONCERNS

The placement around the MOB of an appropriate number of trash receptacles provided by San Franciscans for a Cleaner City and the implementation of an MOB employee/patient education program to encourage their use would reduce MOB litter in the neighborhood. Pan-Med has agreed to these measures.

The attractivness of the MOB construction site to neighborhood child trespassers would be reduced if the site were watched by a security patrol-person. Pan-Med has agreed to adopt this measure.

Installation of low level lighting in the landscaping surrounding the MOB and in the plaza located on the east side of the building, and the installation of the fence between the plaza and the Sacramento Street sidewalk would improve the security of the MOB. Pan-Med has agreed to implement this measure.

The installation of a stop sign at the intersection of Webster and Washington Streets would slow down traffic travelling on Webster Street. Pan-Med has agreed to join with the neighborhood in seeking the installation of this sign.

The parking demand which has been estimated for the MOB would be met by the parking garage which is proposed for the MOB. Since the MOB parking demand is only an estimate, the actual MOB parking demand may be more or less. Providing a parking space supply which exceeds the estimated demand would provide a margin for error if the actual demand exceeds estimated demand. Pan-Med is not at this time considering an expansion of the MOB parking facility beyond the proposed 288 spaces. At the same time, any excess capacity in parking supply may encourage driving to the MOB by employees and patients who would not otherwise do so.

Preferential parking for the Pacific Heights neighborhood has been approved by the Board of Supervisors. However, it has not been implemented yet. Pan-Med has agreed to set the rates of the MOB parking garage at a rate discouraging its use by non-MOB staff.

Pan-Med has agreed to install pedestrian warning signs and signals at the exit and entrance points of the MOB garage. This would help avoid conflicts and possible accidents between pedestrian and vehicular traffic.

Pan-Med has agreed that the MOB lunchroom and outdoor plaza be made available for use by the relatives and friends of MOB patients to discourage their loitering in the surrounding neighborhood streets.

# CHAPTER VI

# UNAVOIDABLE ADVERSE EFFECTS

## A. VISUAL CHARACTER

Implementation of the proposed project would increase the amount of medical building space and decrease the amount of open space in the Pacific Heights neighborhood.

## B. TRANSPORTATION

During construction there would be an increase in vehicular traffic in the vicinity of the proposed MOB site and the existing unavailability of on-street parking would be exacerbated by the temporary removal of some on-street parking spaces. After completion of the MOB, the traffic service level of the intersection of California and Fillmore Streets would be degraded during the morning peak period from a C to D level of service. Two existing on-street parking spaces would be permanently removed from the parking supply.

## C. NOISE

During construction, the "worst-case" condition (i.e., operation of impact wrenches) would result in noise levels of between 70-80 dBA inside the Stanford Medical Office Building, the occupied structure which is nearest to the construction site. Existing maximum noise levels inside the School of Dentistry and residences on Webster and Clay Streets would be increased by 5 and 10 dBA, respectively.

## D. AIR QUALITY

Construction would produce temporary increases in dust generation. Construction activities would generate pollutants in the vicinity of the project. Trucks and equipment would all release exhausts that would affect neighboring residences during construction hours. Upon completion of construction traffic generated by the MOB would increase CO levels.

## E. ENERGY

Operation of the proposed MOB would annually consume approximately 6.6 kwh of electricity, generated primarily from non-renewable fossil fuels, and 20,090 therms of natural gas, also a nonrenewable energy resource.

# CHAPTER VII

## ALTERNATIVES AND THEIR IMPACTS

### A. NO PROJECT

Under the no-project alternative, the site of the proposed MOB would remain vacant, at least for the short term. PMC could be expected to revise its institutional master plan in order to use this site for some medical facility. Short of actually undertaking such a plan revision, PMC is unable to comment on the exact nature and purpose of this facility. PMC has stated that it will retain ownership of the proposed MOB site for the indefinite future.[1]

If the no-project alternative were implemented, the impacts which would be associated with the construction of the MOB, including traffic congestion, noise, and dust, and impacts associated with the operation of the MOB would not immediately occur. The site would remain open until some other facility were approved and built. Estimated annual tax revenue increases of about $147,000 would not occur.

PMC and Pan-Med have rejected the no-project alternative because it does not conform to the goals for the site in the PMC Institutional Master Plan

### B. POSTPONEMENT OF THE PROJECT

Under this alternative, the impacts of the proposed MOB would be deferred to some unknown later date. This alternative has been rejected by Pan-Med and PMC because the need for the facility is immediate.

---

[1] Oren Reinbolt, Director of Plant and Systems, PMC, telephone conversation, 11 April 1979.

## C. ALTERNATIVE USE OF THE SITE

### 1. Development of the Site as Park

This alternative would develop the proposed MOB site as a park. Construction of a park would have impacts similar to those generated by the construction of the MOB, but of not nearly the same magnitude. Once in operation, the impacts of the use of the site for a park would be similar to the impacts of the other parks in the area, including provising open space in a densely populated area.

Because of the operation and maintenance of recreation facilities is beyond the scope of the corporate purposes of PMC, the site would have to be conveyed to some other authority to realize this alternative. Because PMC desires to retain ownership of the site, it would probably have to be acquired by a public entity through condemnation.

The City and County of San Francisco is the institution most likely to undertake this development. However, the fiscal constraints of Propositions 13 and 4 and the close proximity of 2 existing parks, Alta Plaza and Lafayette Park, make it extremely unlikely that the City would assume this responsibility.

The visual, transportation, and energy impacts related to the MOB would not occur under this alternative. Noise and air quality impacts would be reduced.

### 2. Development of the Site in Multi-Family Housing Compatibility With RM-2 Zoning

Under the existing zoning, an apartment building with a maximum of approximately 60, 2-bedroom units could be constructed on the proosed MOB site. Such a structure would encompass a total of 90,000 square feet within 4 1/2 to 5-stories constructed over a 1-level above ground parking garage.

The construction impacts of this alternative would closely approach those of the proposed MOB. Once in operation, this alternative would generate less traffic than the MOB alternatives and would therefore generate a smaller noise impact.

The major impact associated with using the site for multi-family housing would be the noise generated by traffic on Sacramento Street, and to a lesser extent Webster Street between Sacramento Street and Clay Street. Existing noise levels exceed the goals of the City and County of San Francisco for residential uses.[1] As the Ldn at the building facade on Sacramento Street exceeds 70 dB, the City would require an acoustical report detailing the manner in which the noise levels inside the building could be reduced. The State of California would also require an acoustical report on a multi-family project, under the Noise Insulation Standards, Section 1092, Title 25 of the California Government Code. This report is required for multi-family housing projects proposed in areas where the Ldn exceeds 60 dB outdoors. The report must detail the manner in which interior noise levels would be reduced to an Ldn of 45 dB or less. Based on data from other projects of this type, closed windows yeilding approximately 25 dBA of reduction would be required. Closing the windows would require that the units be mechanically ventilated, which would have energy consumption impacts.

Because of the Muni diesel buses on Sacramento Street, maximum sound levels on the street regularly reach approximately 85 dBA. Therefore, an additional 10 dBA of noise reduction would be desirable. To accomplish this, a wall/window facade yielding at least 35 dBA of noise reduction would be necessary. A building facade which provides 35 dBA of noise reduction would restrict maximum interior levels to 50 dBA. At this noise level the majority of people would judge the interior noise environment to be acceptable. This level of noise reduction is possible to achieve but probably would increase construction costs.

The development of housing, other than those associated with PMC medical facilities, is beyond the scope of PMC's corporate powers. To implement this altenative, PMC would have to first convey the site to another party. This would be in conflict with PMC's desire to retain ownership of the subject site.

---

[1] "Environmental Protection Element, the Comprehensive Plan, City and County of San Francisco", Noise Element adopted 19 September 1974, Resolution 7244.

## D. ALTERNATIVE DESIGN OF THE MOB

Three alternative designs were examined for the MOB project; 65,000 sq. ft., 113,000 sq. ft., and 165,000 sq. ft. The 65,000 sq. ft size was selected as one alternative at the request of the Citizens Advisory Committee whose members desired an impact analysis of a building one-half the size of the proposed MOB, regardless of whether a building of this size is economically feasible. The second alternative design size, 113,000 sq. ft., was suggested by the project sponsor and the third alternative, 165,000 sq. ft., was the originally proposed size of the MOB before the project sponsor reduced it in response to neighborhood.

### 1. 65,000 Square Foot MOB

This alternative is one-half the gross square footage of the proposed MOB. It would accommodate 65-70 doctors in a 5-story structure, approximately 100' x 130' located over a 1 1/2 level parking garage. Compared to the proposed MOB, this alternative would essentially cut the proposed structure in half along its width, and would remove that half located nearest to Sacramento Street.

### 2. 113,000 Square Foot MOB

This alternative would accommodate approximately 110-115 doctors in a structure closely resembling the proposed MOB. The reduction in square feet from the 131,000 which is presently proposed would be achieved by shortening the current structure at each end of the 14 feet.

### 3. 165,000 Square Foot MOB

This alternative would accommodate 160-165 doctors in a structure 8-stories high, with the last two stories occupying only 1/2 the total site area.

### 4. Impacts

The variation in impacts which would be achieved by the above alternatives is in general a question of degree rather than kind. Decreasing the size of the MOB would result in a reduction in the number of vehicle trips generated by the structure, with corresponding reductions in the noise and air quality degradation. Increases in size would also proportionately increase the impacts.

The smallest of the alternative designs would have lesser impacts on the existing view to the west down Clay Street from the Burns Memorial Court. The 65,000 square foot MOB design would also result in the greatest reduction in the wind impacts on the Clay Street vacation.

With the exception of the 165,000 square foot design, none of the above alternative designs would allow Pan-Med to achieve its project goals with respect to MOB physician composition and mix. The 65,000 square foot alternative would not be economically feasible.

## E. ALTERNATIVE LOCATION OF THE MOB

Originally the PMC Master Plan (2 September 1971) proposed that the MOB be located at the northeast corner of the Clay and Buchanan street intersection. However, the City Planning Commission, in Resolution No. 6759, approved the PMC as a Planned Unit Development subject to the following condition: "Any expansion of the Pacific Medical Center site shall be generally to the west and southwest."[1] Therefore PMC moved the proposed MOB site from the Clay and Buchanan street location to a more southwesterly location at the present site on the corner of Sacramento and Webster streets. The MOB proposed site was moved to its present location to comply with City Planning Commission wishes and to site the MOB at a location on the PMC campus where its height and bulk would be visually less conflicting with residential structures.

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[1] City Planning Commission Resolution, No. 6759, 30 September 1971.

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# CHAPTER IX

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## APPENDIX A - TRANSPORTATION

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## MOB EXISTING CONDITIONS AND IMPACTS

Existing transportation conditions and the impacts of the MOB on these conditions are presented in this appendix in 4 sections; vehicular traffic, public transportation, parking, and bicycle use. The transportation impacts in each of these 4 sections are presented as a worst case analysis, that is the MOB is analyzed assuming all the doctors, patients, and employees who would work in the MOB would be new to the MOB study area and therefore all the impacts created by the MOB and its personnel would be in addition to existing conditions. The estimated impacts presented in the 4 transportation sections may be overstated because approximately 27% of the physicians who would occupy the MOB are already practicing within the MOB study area at the PMC. Therefore, the transportation impacts of these doctors, their patients and employees are accounted for in the existing conditions analysis of the 4 transportation sections. The relationship between these physicians and a possible reduction in MOB transportation impacts is discussed in detail in the "Reduction in MOB Impacts" section of this Appendix, page 174.

## VEHICULAR TRAFFIC

### Existing Roadway System

Pacific Medical Center, which encompasses the site of the proposed MOB, is served by a basic grid pattern of streets and arterials typical of San Francisco. This pattern is illustrated in Figure A-1. There are, however, special considerations in the area which currently determine the operation of the existing transportation network. Both east and west of the proposed project site are major parks which interrupt the continuity of the grid pattern. Alta Plaza, west of the project, interrupts the traffic flow on Washington, while to the east Lafayette Square interrupts Clay Street. These elements of the existing roadway systems affect the distribution of existing traffic flows in the area.

As designated in the Transportation Element of the San Francisco Master Plan, there are 2 Secondary Thoroughfares in the area:

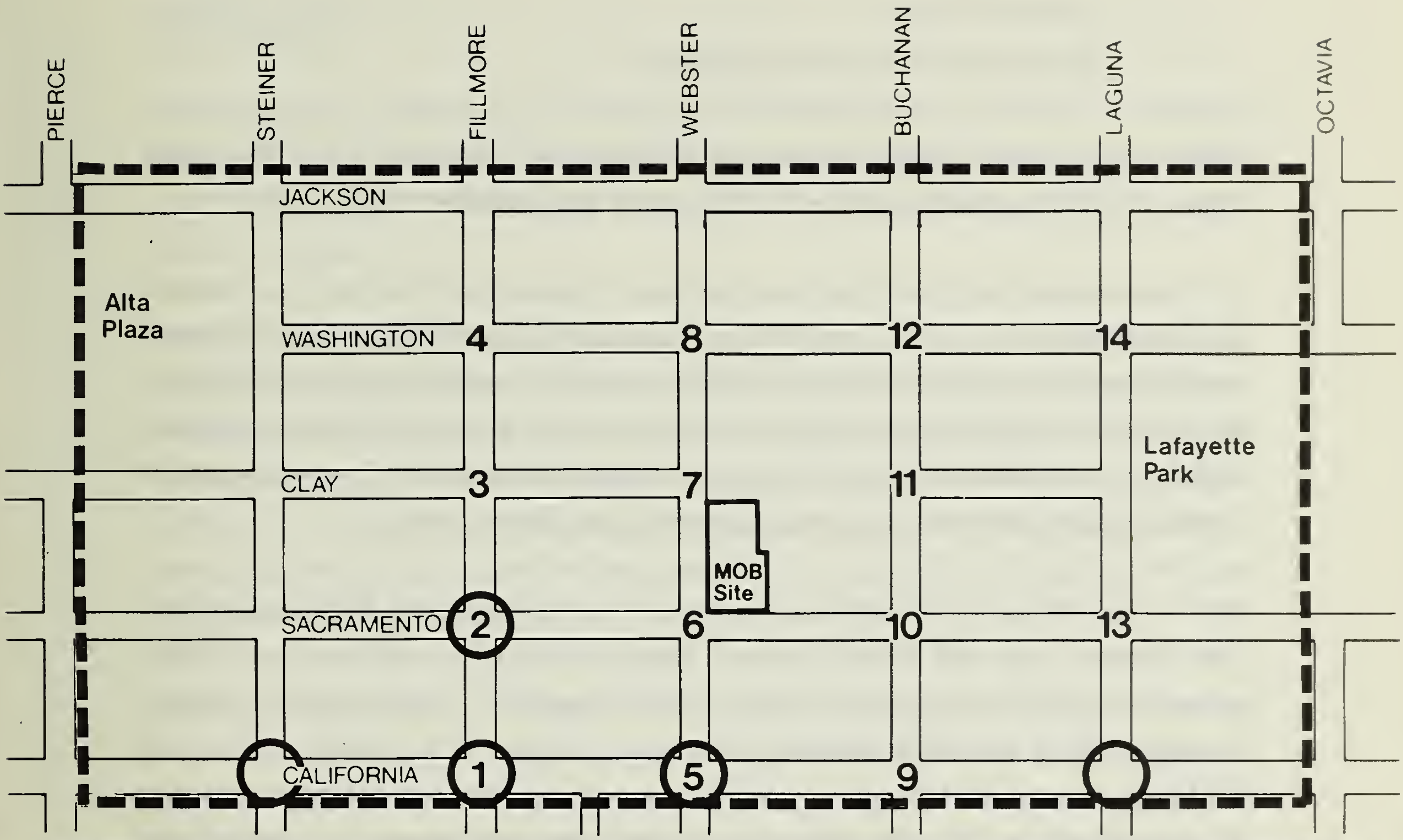

Figure A-1TRAFFIC AND PARKING STUDY AREA

▬ ▬ ▬ PARKING STUDY AREA BOUNDARY

1 NUMBERS INDICATE INTERSECTIONS AT WHICH TRAFFIC COUNTS WERE TAKEN

○ INTERSECTIONS WITH TRAFFIC SIGNALS

- California Street
- Webster Street, south of California

There are no Major Thoroughfares and Recreational Streets in the MOB project area. All other streets in the surrounding area are classified as local streets.

In the east-west direction 4 streets, Jackson, Washington, Clay and Sacramento, have the same right-of-way and the same pavement width of 38.75 feet between curb faces. This width provides for 1 lane of traffic in each direction plus parking on both sides of the street. Also in th east-west direction, California Street, within its available 61.00 feet of pavement width, provides for 2 moving lanes of traffic in each direction plus parking on both sides of the street.

With 1 exception, the 5 north-south streets, Laguna, Buchanan, Fillmore, Steiner, and Webster, have the same pavement width of 38.75 feet between curb faces, allowing 1 traffic lane plus parking in each direction. The exception, Webster Street, is 50.75 feet wide between curb faces. Since this additional width is not sufficient to provide for parking on both sides of the street plus 2 lanes of traffic in each direction, Webster Street also follows the basic design of 1 traffic lane plus parking in each direction.

All of the streets in the surrounding area have sidewalks on both sides. Most of the streets have sidewalks totalling 15 feet in width. Three exceptions are noted as follows;

- Webster - 9 feet
- California - 12 feet
- Clay (Fillmore to Webster) - 12 feet

Signals are located at the intersections of Fillmore Street with Sacramento and California, as well as at the intersection of California with Webster, Steiner, and Laguna. All other intersections have stop signs except the intersections of Washington with Steiner and Clay with Laguna which have no traffic control devices.

## Existing Traffic

Existing traffic consists of all traffic that is in the area now or will be in the area related to other projects, but which does not have an origin or destination at the MOB project site. With respect to the site, these volumes represent "through" traffic volumes.

Two-way daily traffic volumes and peak hour traffic counts were collected from the City and County of San Francisco. Existing documents from studies previously accomplished in the area were reviewed and pertinent traffic data were extracted for compilation of the existing traffic setting. Because of the scarcity of current traffic count data during peak periods of the day and, in fact, the requirements to determine the times of peak traffic demands, a program of manual traffic data collection was implemented.

Daytime traffic counts and intersection turning movements were collected for all intersections on the 4 east-west and 4 north-south streets surrounding the proposed project site. The collected traffic counts were correlated and normalized in order to reconstruct a typical weekday traffic flow pattern. The study area thus developed includes 14 intersections as illustrated in Figure A-1 at page 127.

These 14 intersections were chosen because they would be the most likely to be impacted by the proposed MOB. As distance from the project site increases, the number of intersections and possible travel routes increases at a geometric rate, and therefore the traffic volumes and percent impacts also decrease at a geometric rate.

The peak highway hour[1] on most intersections around the site occurs in the morning between 8:00 a.m. and 9:00 a.m., and/or in the evening between 4:30 p.m. and 5:30 p.m.

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[1] See Glossary of Transportation Terminology beginning at page 183.

Existing off-peak day volumes (10:00 a.m. - 3:00 p.m.) are approximately 33% of daily traffic, and off-peak night traffic volumes (7:00 p.m. - 6:00 a.m.) are approximately 13% of daily traffic. These percentages are based on typical percent distribution from 24 hour counts at other similar locations, combined with counts in the proposed MOB project area.

Congregation Sherith Isreal is located at the corner of California and Webster. During 2 major Jewish Holidays - Rosh Hashana and Yom Kippur, traffic volumes in the area increase in off peak hours, since holiday services start at 10:00 a.m. and finish around 1:00 p.m. on Rosh Hashana on 7:00 p.m. on Yom Kippur.

The transportation impcts of any proposed development are evaluated on the basis of peak hour capacity analysis.[1] However, a complete analysis will require a comparison of before and after traffic volumes during an average weekday. Table A-1 below, presents the existing average daily traffic (ADT) volumes in the area.[2]

TABLE A-1. COMPILATION OF EXISTING AVERAGE DAILY TRAFFIC

| Street Name | Existing 2- Way Daily Traffic* |
|---|---|
| Washington | 1600 |
| Clay (west of PMC) | 2800 |
| Clay (east of PMC) | 1000 |
| Sacramento | 5600 |
| California | 12700 |
| Fillmore | 7200 |
| Webster | 5400 |
| Buchanan | 2700 |
| Laguna | 4600 |

*The indicated values represent composite averages along the street sections under study.

Source: J.D. Drachman Associates

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[1] See Glossary of Transportation Terminology, page 183.

[2] Ibid.

## Capacity Evaluation

The capacity of a street is determined by its most critical elements - the intersections. Transportation facilities with uninterrupted flows will exhibit much higher capacities, but none are present in and around the proposed MOB project area.

Capacity calculations and traffic operations level of service determinations have been made for all of the intersections enclosed within the 14 intersections traffic study area. The capacity analyses of intersections around the area were made in accordance with criteria established by the Highway Research Board, in its 1965 Highway Capacity Manual. The procedure is based on empirical data, primarily approach width modifying parameters, including: Signal Cycle Load Factor, Metropolitan Area Population, Percent Trucks and Buses, and Location of Bus Stops. The procedure is widely accepted and used extensively and nationally within the traffic engineering profession.

Figure A-2 and Table A-2 present the calculated percent of capacity utilization for all of these intersections, during both peak traffic periods of the day. As indicated in Table A-2, all of the analyzed intersections in the area are operating at the traffic service level of A, with the exception of the Fillmore and California intersection, which is operating at service level C during the morning peak hour only.

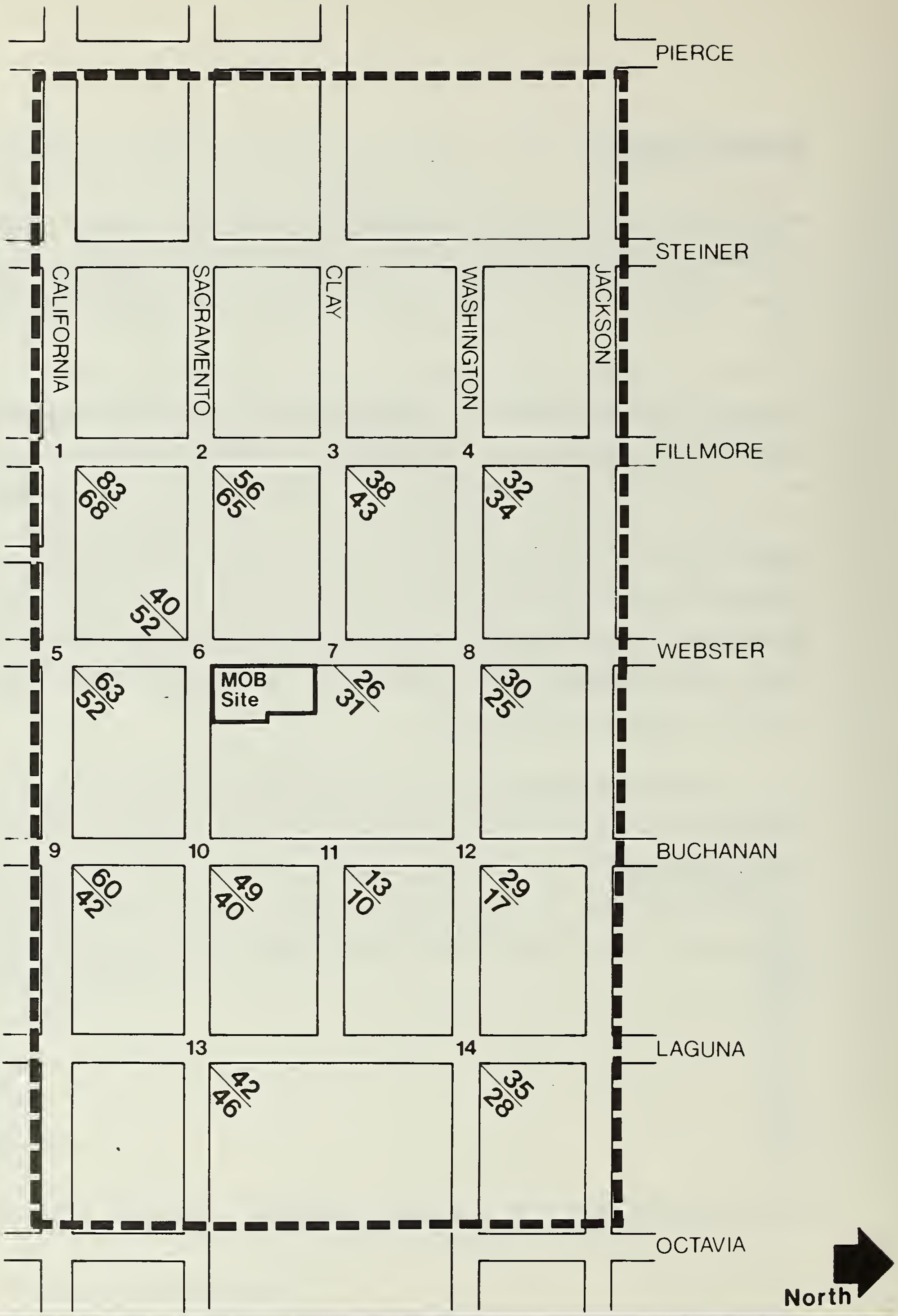

Figure A-2 EXISTING STREET INTERSECTION PERCENT OF CAPACITY UTILIZATION

60 — AM PEAK HOUR
42 — PM PEAK HOUR

6 INTERSECTION NUMBER
▬ ▬ ▬ PARKING STUDY BOUNDARY

TABLE A-2. EXISTING PEAK HOUR CAPACITY UTILIZATIONS

| | | AM PEAK HOUR | | PM PEAK HOUR | |
|---|---|---|---|---|---|
| # | INTERSECTION | % of Capacity | Level of Service | % of Capacity | Level of Service |
| 1. | Fillmore & California | 83 | C | 68 | A |
| 2. | Fillmore & Sacramento | 56 | A | 65 | A |
| 3. | Fillmore & Clay | 38 | A | 43 | A |
| 4. | Fillmore & Washington | 32 | A | 34 | A |
| 5. | Webster & California | 63 | A | 52 | A |
| 6. | Webster & Sacramento | 40 | A | 52 | A |
| 7. | Webster & Clay | 26 | A | 31 | A |
| 8. | Webster & Washington | 30 | A | 25 | A |
| 9. | Buchanan & California | 60 | A | 42 | A |
| 10. | Buchanan & Sacramento | 49 | A | 40 | A |
| 11. | Buchanan & Clay | 13 | A | 10 | A |
| 12. | Buchanan & Washington | 29 | A | 17 | A |
| 13. | Laguna & Sacramento | 42 | A | 46 | A |
| 14. | Laguna & Washington | 35 | A | 28 | A |

Source: J.D. Drachman Associates

Following are definitions of traffic service levels[1] with their percent capacities adjusted to reflect urban intersection service levels.

Level of service A describes a condition of free flow, with low volumes and high speeds. Traffic density if low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay. The percent of total capacity which is utilized is less than 75%.

Level of service B is in the zone of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted. The lower limit (lowest speed, highest volume) of this level of service has been associated with service volumes used in the design of rural highways. The percent of total capacity which is utilized is between 75-80%.

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[1] Source: Office of Environmental Review, Department of City Planning, San Francisco, April 13, 1977.

Level of service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, with service volumes perhaps suitable for urban design practice. The percent of total capacity which is utilized is between 81-83%.

Level of service D approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time. The percent of total capacity which is utilized is between 84-92%.

Level of service E cannot be described by speed alone, but represents operations at even lower operating speeds than in level D, with volumes at or near the capacity of the highway. Flow is unstable, and there may be stoppages of momentary duriation. The percent of total capacity which is utilized is between 93-100.%

Level of service F describes forced flow operation at low speeds, where volumes are above capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of the downstream congestion. In the extreme, both speeds and volume can drop to zero. The percent of total capacity which is utilized is over 100%.

## Estimation of Future Traffic - MOB Construction Phase

Traffic resulting from the MOB construction would depend upon the timing of construction operations and choice of access routes to the site. Traffic would be related to the additional truck volumes generated by demolition and construction activities, with attendant nuisances and effects on traffic congestion.

## Estimation of Future Traffic - MOB Operation Phase

The estimation of future traffic which can be expected to be associated with the operation of the proposed MOB requires three basic steps. These are: determination trip generation, trip distribution and traffic assignment.

### 1. Trip Generation

Trip generation is an estimate of the total number of vehicular, transit, and pedestrian-trips associated with the proposed MOB, and is in turn used to estimate the peak hourly flows which would impose the highest traffic loading conditions on the surrounding street system. The peak traffic hours around the area occur on weekdays between 8:00 a.m. and 9:00 a.m. and between 4:30 p.m. and 5:30 p.m. These time periods represent both the time when most of the adjacent transportation facilities are subject to maximum traffic loads and when the highest combined MOB plus non-MOB related traffic volumes would be likey to occur.

The trip generation characteristics of a specific medical office building vary greatly, and are of a function of various measurable parameters, including building size, hours of operation, and location relative to medical care consumers. The largest variable in estimating trip generation characteristics is the particular speciality mix of the physicians occupying the building. If no other data are available, the trip generation effort would gather overall averages for other medical office buildings and relate them to said buildings on a per unit basis, such as per doctor, per thousand square feet of medical office space, etc. The inherent assumption in this procedure is that the proposed medical office building would exhibit a range of specialities and a resulting daytime population similar to the existing/measured building. Differences in medical specialty compositions would be difficult to reconcile.

In the case of the MOB project, 2 factors have contributed to a better than average basis for estimating trip generation characteristics, as follows:

a) A working knowledge of the expected MOB building occupancy by medical specialties. This data is available because approximately 100 of the 125 intended doctor occupants of the MOB project have signed written commitments to this effect.

b) A substantial portion of the "committed" future medical occupants of the MOB projects have current ongoing medical practices in San Francisco, and many offices were available for the conduct of a medical officer user transportation and parking survey.

The MOB user survey included the collection of patient, employe and doctor travel and parking habits for a total of 94 doctors and 123 employees. These 94 doctors represent a doctor and employee sample of 94/125 or 75% of intended MOB occupants. Similarly, the patient survey collected a total of 876 patient responses from a reported universe of 4198 patients for an overall patient sample of approximately 21 percent. The survey questionnaire appears in Figure A-3.

The results of all the patient responses were collected and collated into 3 categories of specialty mix as well as 3 categories of location of offices within San Francisco. Although data were collected and stratified in this manner for processing and handling, it was deemed that statistical inferences from a 3 x 3 = 9 cell matrix would result in some unreliable answers because some of the cells would contain relatively small sample sizes. Therefore, patient data were stratified in only 2 ways:

a) All specialties categorized by 3 locations, as follows:

| | |
|---|---|
| Downtown | - Medical offices located downtown (400 - 600 block of Post and Sutter Streets). |
| PMC | - Medical offices located in and around the immediate vicinity of the Pacific Medical Center (2300 block of Clay, California and Sacramento Streets). |

PPQ1

## PARKING QUESTIONNAIRE

To the Office Administrator:

As you may already know, a new medical office building is being planned at the northeast corner of Webster and Sacramento. This survey is an attempt to determine facts about traffic and access to the building.

Please answer the following questions.

Address of existing office and names of physicians:

________________________________________

________________________________________

________________________________________

________________________________________

Number of physicians in this practice ______

Medical Specialty __________________________

Typical number of patient office visits each day:

| DAYS | MON. | TUES. | WED. | THURS. | FRI. | SAT. |
|---|---|---|---|---|---|---|
| | | | | | | |
| Time:<br>8-10 | | | | | | |
| 10-12 | | | | | | |
| 12-2 | | | | | | |
| 2-4 | | | | | | |
| 4-6 | | | | | | |
| | | | | | | |

FIGURE A-3 - MOB USER QUESTIONNAIRE

## EMPLOYEES PARKING QUESTIONNAIRE

A medical office building is being planned for a site adjacent to Pacific Medical Center. Would you please take a few moments to complete this questionnaire?

Thank you.

1. Where do you live?

☐ San Francisco
☐ South San Francisco
☐ Daly City
☐ East Bay
☐ Marin
☐ Peninsula
☐ Other ______________________

2. What days and hours do you work? Please write in arrivals and departure times.

| Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. | Sun. |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |

(If this is variable, use your most recent work week.)

3. How do you usually get to and from work:

☐ Public Transportation:
Please describe which lines ______________________

☐ Car (please check one):
  ☐ alone by car
  ☐ car pool
  ☐ dropped off/picked up by car

☐ Walk

☐ Other ______________________

4. If you drive a car here, where do you usually park?

☐ On the street
☐ PMC Garage
☐ Other Garage
☐ Other (what?) ________________

FIGURE A-3 - MOB USER QUESTIONNAIRE (Continued)

## PATIENT PARKING QUESTIONNAIRE

Thank you for your time in completing the following questionnaire.

1. What time did you arrive at this office? ____________________

2. How did you get here?

   ☐ Public Transportation (which lines) ______________________
   ☐ Car driven by self, parked
   ☐ Car driven by someone else, dropped off
   ☐ Walked
   ☐ Other ____________________________________

3. If you drove a car here, where did you park?

   ☐ On the street
   ☐ Garage (which one) _______________________
   ☐ Other ____________________________________

4. Where do you live?

   ☐ San Francisco
   ☐ South San Francisco
   ☐ Daly City
   ☐ East Bay
   ☐ Marin
   ☐ Peninsula
   ☐ Other ____________________________________

5. Did you come to this appointment from

   ☐ Home
   ☐ Other (where) ____________________________

FIGURE A-3 - MOB USER QUESTIONNAIRE (Continued)

Uptown - Medical offices located elsewhere in San Francisco (Van Ness Avenue and the 3800 - 4200 blocks of Sacramento, California and Geary).

b) All locations categorized by 3 doctor specialty mix-patient volume groups, as follows:

Low Volume - Specialties which primarily practice as hospital consultants to other physicians regarding their hospital inpatients. Therefore, the physicians have generally low observed patient office visit characteristics. Representative specialties include:

Hematology - 1.0 average number of patients/day
Cardiology - 2.3
Pediatric Cardiology - 2.3
Pulmonary - 2.5
Neurology - 2.7
Thoracic Surgery - 2.9

Medium Volume - Specialties with generally medium observed patient office visit characteristics. Representative specialties include:

Urology - 5.6 average number of patients/day
Psychiatry - 6.7
Surgical - 7.0
Orthopedics - 7.2
Internal Medicine - 10.0
Family Practice - 12.0
Colon Surgery - 12.9

High Volume - Specialties with generally high observed patient office visit characteristics. Representative specialties include:

Gynecology - 15.0 average number of patients/day
Opthalmology - 15.0
Otolaryngology - 17.4
Dermatology - 23.5

Table A-3 presents the results of the MOB survey tabulated by 3 locations and mode of travel.[1] It should be noted that the percent of transit users is lowest, 22%, among patients arriving at the PMC locations versus a similar 27% for patients arriving at both uptown and downtown locations. The downtown locations do, however, attract a much larger proportion of patients arriving by walking and other modes, 19%, than are attracted by the other locations, 10% uptown and 9% PMC.

TABLE A-3. MOB USER SURVEY - LOCATION VERSUS ARRIVAL MODE FOR PATIENTS

| Location | Number of Doctors | Total Number of Patients Per Week | Sampled Patients Per Week | | | | |
|---|---|---|---|---|---|---|---|
| | | | Total | Public Transpot | Car (parked) | Car (continued) (not parked) | Walk & Others |
| Downtown | 22 | 1344 | 211<br>(100) | 57<br>(27) | 97<br>(46) | 16<br>(8) | 41<br>(19) |
| PMC | 51 | 1634 | 391<br>(100) | 87<br>(22) | 240<br>(61) | 30<br>(8) | 34<br>(9) |
| Uptown | 21 | 1220 | 331<br>(100) | 91<br>(27) | 181<br>(55) | 25<br>(8) | 34<br>(10) |
| TOTALS | 94 | 4198 | 933 | 235 | 518 | 71 | 109 |

Legend:

57 - number of respondents
(27) - percent of total respondents in that locational category.

Source: JDDA tabulation of survey responses.

Table A-4 presents the result of the MOB user survey tabulated by the 3 doctor specialty mix-patient volume groups. It should be noted that approximately 50% of all the surveyed doctors fell in the medium volume category and about 25% each fell into the high and low volume categories. Thus, all of the 3 categories have a representative portion of the total sampled universe.

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[1] See Glossary of Transportation Terminology, page 183.

TABLE A-4. MOB USER SURVEY - SPECIALTY MIX VERSUS AVERAGE PATIENT VISITS

| Doctor Specialty Mix - Patient Volume Characteristic | Number of Doctors | Total Number of Patients Per Week | Total Sampled Patients Per Week | Average Number of Patients Per Doctors Per Day |
|---|---|---|---|---|
| Low Volume | 25 | 286 | 131 | 2.3 |
| Medium Volume | 47 | 2035 | 406 | 8.7 |
| High Volume | 22 | 1877 | 396 | 17.1 |
| TOTALS | 94 | 4198 | 933 | 8.9 |

Source: JDDA tabulation of survey responses.

Table A-5 presents the results of the MOB user survey tabulating the employees responses as to location versus mode of transportation. This table points out that a downtown location encourages a higher percentage of transit use than either the uptown or PMC locations. At downtown locations, 50% of the employees are reportedly using public transportation versus 20% and 24%, respectively, for PMC and uptown locations. Furthermore, the auto arrivals (driver and/or passenger) are almost equal at both non-downtown locations (75% and 76%).

The results of the various survey components as presented in the following tables were utilized to develop a trip generation estimate for the MOB project. Table A-6 presents a summary of applicable trip generation criteria and the development of trip generation rates.

## TABLE A-5. MOB USER STUDY - LOCATION VERSUS ARRIVAL MODE OF EMPLOYEES

| Location | Number of Offices | Number of Doctors | Total Number of Employees | Total | Sampled Number of Public Transport | Car (parked) | Car (not parked) | Walk & Others |
|---|---|---|---|---|---|---|---|---|
| Downtown | 13 | 22 | 37 | 34<br>(100) | 17<br>(50) | 15<br>(44) | 2<br>(6) | --<br>(0) |
| PMC | 24 | 51 | 60 | 56<br>(100) | 11<br>(20) | 38<br>(68) | 4<br>(7) | 3<br>(5) |
| Uptown | 13 | 21 | 26 | 25<br>(100) | 6<br>(24) | 18<br>(72) | 1<br>(4) | --<br>(0) |
| TOTALS | 50 | 94 | 123 | 115 | 34 | 71 | 7 | 3 |

Legend:

17 - number of respondents
(50) - percent of total respondents in that locational category.

Source: JDDA tabultion of survey responses.

Table A-7 presents the assumed distribution of intended doctor occupants by specialties at the MOB and converts these into the forecasted MOB doctor population by specialty groups.

Finally, the results of the daily trip generation criteria and the assumed doctor population of the MOB is translated into a forecast of daily and peak hour vehicle trips, as presented in Table A-8, page 146.

TABLE A-6. SUMMARY OF DAILY TRIP GENERATION

| Person Trip Generation (By Volume Specialty) | Two Way Average Daily (Person Trips/Doctor) Patients | Doctors | Office Employees | Total |
|---|---|---|---|---|
| Low | 4.6 | 2.0 | 2.6 | 9.2 |
| Medium | 17.4 | 2.0 | 2.6 | 22.0 |
| High | 34.2 | 2.0 | 2.6 | 38.8 |
| APPLICABLE MODAL SPLIT | | | | |
| Percent Transit | 22 | -- | 20 | N.A. |
| Percent Vehicles | 69 | 100 | 75 | N.A. |
| Percent Other | 9 | -- | 5 | N.A. |
| VEHICLE TRIP GENERATION (ADT - 2 WAY) | | | | |
| Low | 3.2 | 2.0 | 2.0 | 7.2 |
| Medium | 12.0 | 2.0 | 2.0 | 16.0 |
| High | 23.6 | 2.0 | 2.0 | 27.6 |

Source: JDDA

### 2. Trip Distribution

The direction of approach or trip distribution of travelers to and from the proposed MOB site would be determined by a definition of the service area for specific MOB user populations, patronage distribution within the service area, and the relative efficiency in terms of travel times and volume to capacity ratios of the various streets and highways leading to the site. The relationship between the proposed MOB and the San Francisco Bay Region has been extracted from the MOB user survey. Table A-9 presents the estimated percent distribution of trips to the proposed MOB by San Francisco City zip codes and generalized Bay Area locations.

### 3. Traffic Assignment

Determination of the probable routes that doctors, employees and patients of the MOB would take is referred to as traffic assignment. The traffic assignment procedure is intended to estimate the driving patterns to and from the MOB site,

TABLE A-7. ASSUMED DISTRIBUTION OF MOB DOCTORS BY SPECIALTIES
MOB PROJECT

| | | |
|---|---|---|
| Medical Hematology | 3 | |
| Cardiology | 6 | |
| Pediatric Cardiology | 1 | |
| Pumonary Medicine | 3 | |
| Neurology | 3 | |
| Thoracic Surgery | 1 | |
| Cardio-Vascular Surgery | 4 | |
| Nuclear Medicine | 3 | |
| Infectious Disease | 1 | |
| Other | 4 | |
| | — | |
| Low Volume Specialties | 29% | x 125 total doctors = 36 doctors |
| Urology | 4 | |
| Psychiatry | 6 | |
| Surgical | 3 | |
| Orthopedics | 9 | |
| Internal Medicine | 13 | |
| Family Practice | 2 | |
| Colon Surgery | 3 | |
| Oncology | 3 | |
| Plastic Surgery | 1 | |
| Gatroenterology | 2 | |
| Hand Surgery | 3 | |
| | — | |
| Medium Volume Specialties | 49% | x 125 total doctors = 61 doctors |
| Gynecology | 5 | |
| Opthalmology | 9 | |
| Otlaryngology | 5 | |
| Dermatology | 3 | |
| | — | |
| High Volume Specialties | 22% | x 125 total doctors - 28 doctors |
| TOTAL ALL SPECIALTIES | 100% | 125 doctors |

Source: JDDA

TABLE A-8. SUMMARY OF DAILY AND PEAK PERIODS MOB RELATED VEHICLE TRIPS

| | | | | TRIPS | | | |
|---|---|---|---|---|---|---|---|
| | | 2 WAY ADT | | 8:00 to 9:00 AM AM PEAK HOUR | | 4:30 to 5:30 PM PM PEAK HOUR | |
| VEHICLE TRIPS Generation Basis | Generation Parameter | Trips/Doctor | Trips | IN | OUT | IN | OUT |
| A - Patients (by speciality) | | | | * | * | * | * |
| Low Volume | 36 doctors | 3.2 | 115 | 3.0% | 1.0% | 11.4% | 16.5% |
| Medium Volume | 61 doctors | 12.0 | 735 | 3.0% | 1.0% | 11.4% | 16.5% |
| High Volume | 28 doctors | 23.6 | 660 | 3.0% | 1.0% | 11.4% | 16.5% |
| SUB | 125 doctors | 12.1 | 1510 | 25 | 5 | 85 | 125 |
| B - Physicians & Employees | 125 doctors | 4.0 | 500 | 155 | 5 | 10 | 160 |
| C - Lab, Pharmacy & X-Ray | 11.25 TSF | 43.0 | 490 | 15 | 15 | 30 | 30 |
| D - Business Function (Medical Salesman, Building Repairs, Deliveries, etc.) | 125 doctors | 4.0 | 500 | 25 | 25 | 5 | 5 |
| TOTAL | N.A. | N.A. | 3000 | 220 | 50 | 130 | 320 |

*Percent of one way ADT.

Source: JDDA

and to reflect the location of proposed access and egress. The assignment of average daily MOB-related traffic volumes to the surrounding street system is indicated on Figure A-4, page 149, entitled Project Only Two Way Daily Traffic.

## Traffic Impact Summary

The technical analysis performed using the data as previously described is summarized in Tables A-10 and A-11, pages 150 and 153. Table A-10 shows the overall traffic impact on the various street sections in the MOB study area during an average weekday by comparing the existing average daily traffic with the forecast increases in daily volumes on the various street sections due to the MOB development. As indicated, the daily impact is up to a maximum 29% increase in the immediate vicinity of the project site (Webster Street between Clay and California) and diminishes quickly in most directions, except Webster south of California Street, which is a preferred route to and from areas south of the MOB project site. With this exception, access to residential driveways would not be affected by MOB traffic.

Table A-11, page 153, is more specific in that it analyzes all of the intersections in the area during the morning and afternoon peak hours and indicates the forecast increases in capacity utilization during these time periods. This table also shows a level of traffic service for each intersection. Level of traffic service ranges from A (complete free flow) to level F (forced-flow, jammed condition). A detailed description of these traffic service levels has been presented previously, page 153. The changes in capacity utilization during the morning and afternoon peak periods of street operation shown in Table A-11 are illustrated in Figure A-5. This table and figure are the result of a detailed capacity analysis at each of the listed intersections.

As shown on Table A-11, the impact on capacity utilization on most intersections attributable to the proposed MOB would be small, and with the exception of the Fillmore and California intersection, all prevailing service levels would be maintained with the development of the project. The intersection of Fillmore and California would experience an increase of only 20% in the capacity utilization, but at a threshold level between existing C level and forecasted D level of traffic service.

## TABLE A-9. DISTRIBUTION OF TRIPS TO THE PROJECT BY SAN FRANCISCO ZIP CODES

| Origin | - | Zip | Percent Origins |
|---|---|---|---|
| San Francisco | - | 102 | 4.3 |
| | | 103 | 1.5 |
| | | 104 | 4.4 |
| | | 105 | 1.3 |
| | | 107 | 0.7 |
| | | 108 | 1.0 |
| | | 109 | 6.7 |
| | | 110 | 2.7 |
| | | 111 | 2.7 |
| | | 112 | 1.6 |
| | | 114 | 2.8 |
| | | 115 | 4.4 |
| | | 116 | 3.6 |
| | | 117 | 1.5 |
| | | 118 | 3.6 |
| | | 121 | 1.0 |
| | | 122 | 2.2 |
| | | 123 | 3.1 |
| | | 124 | 1.2 |
| | | 127 | 1.5 |
| | | 129 | 0.1 |
| | | 131 | 1.5 |
| | | 132 | 1.2 |
| | | 133 | 2.8 |
| San Francisco | - | 134 | 1.3 |
| South San Francisco | | | 2.1 |
| Daly City | | | 3.1 |
| East Bay | | | 17.8 |
| Marin | | | 11.0 |
| Peninsula | | | 7.3 |
| TOTAL | | | 100.0 |

Source: JDDA tabulation of survey responses

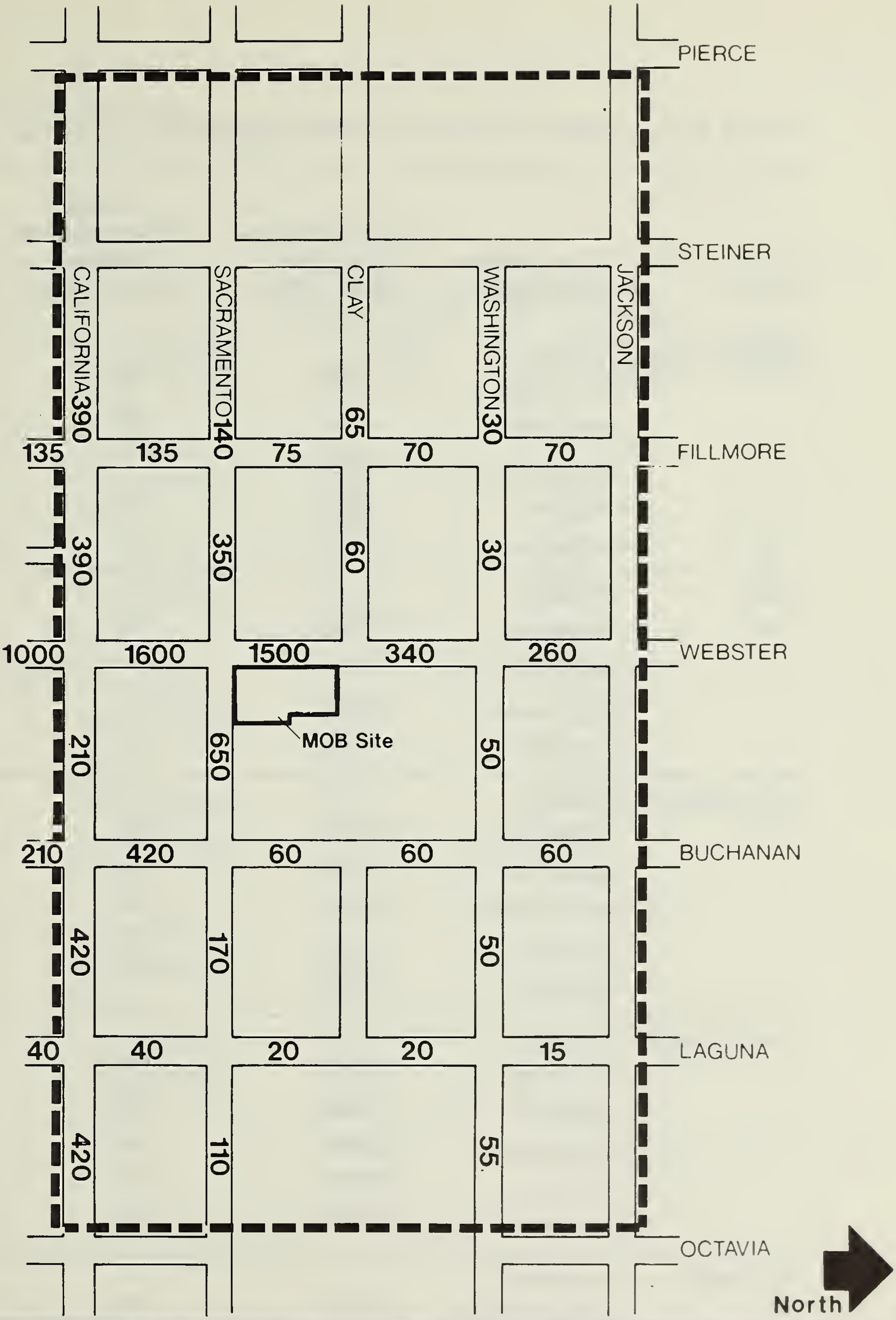

Figure A-4 PROJECT ONLY, TWO-WAY DAILY TRAFFIC

TABLE A-10. SUMMARY OF DAILY TRAFFIC IMPACTS

| Street | Street Section Delimiters | Existing Average Two Way Daily Traffic | Added Project Related Two Way Daily Traffic | Percent Increase |
|---|---|---|---|---|
| WASHINGTON | STEINER | | | |
| | FILLMORE | 1600 | 30 | 2 |
| | WEBSTER | 1600 | 30 | 2 |
| | BUCHANAN | 1600 | 50 | 3 |
| | LAGUNA | 1600 | 55 | 3 |
| | OCTAVIA | 1600 | 50 | 3 |
| CLAY | STEINER | | | |
| | FILLMORE | 2800 | 65 | 3 |
| | WEBSTER | 2800 | 60 | 2 |
| | BUCHANAN | N.A. | -- | -- |
| | LAGUNA | 1000 | -- | -- |
| SACRAMENTO | STEINER | | | |
| | FILLMORE | 5600 | 140 | 3 |
| | WEBSTER | 5600 | 350 | 6 |
| | BUCHANAN | 5600 | 650 | 12 |
| | LAGUNA | 5600 | 170 | 3 |
| | OCTAVIA | 5600 | 110 | 2 |
| CALIFORNIA | STEINER | | | |
| | FILLMORE | 12700 | 390 | 3 |
| | WEBSTER | 12700 | 390 | 3 |
| | BUCHANAN | 12700 | 210 | 2 |
| | LAGUNA | 12700 | 420 | 3 |
| | OCTAVIA | 12700 | 420 | 3 |
| FILLMORE | JACKSON | | | |
| | WASHINGTON | 7200 | 70 | 1 |
| | CLAY | 7200 | 70 | 1 |
| | SACRAMENTO | 7200 | 75 | 1 |
| | CALIFORNIA | 7200 | 135 | 2 |
| | PINE | 7200 | 135 | 2 |

(Continued, next page)

TABLE A-10 (Continued)
Summary of Daily Traffic Impacts

| Street | Street Section Delimiters | Existing Average Two Way Daily Traffic | Added Project Related Two Way Daily Traffic | Percent Increase |
|---|---|---|---|---|
| WEBSTER | JACKSON | | | |
| | WASHINGTON | 5400 | 260 | 5 |
| | CLAY | 5400 | 340 | 6 |
| | SACRAMENTO | 5400 | 1500 | 28 |
| | CALIFORNIA | 5400 | 1600 | 29 |
| | PINE | 5400 | 1000 | 19 |
| BUCHANAN | JACKSON | | | |
| | WASHINGTON | 2700 | 60 | 2 |
| | CLAY | 2700 | 60 | 2 |
| | SACRAMENTO | 2700 | 60 | 2 |
| | CALIFORNIA | 2700 | 420 | 16 |
| | PINE | 2700 | 210 | 8 |
| LAGUNA | JACKSON | | | |
| | WASHINGTON | 4600 | 15 | -- |
| | CLAY | 4600 | 20 | 00 |
| | SACRAMENTO | 4600 | 20 | 00 |
| | CALIFORNIA | 4600 | 40 | 1 |
| | PINE | 4600 | 40 | 1 |

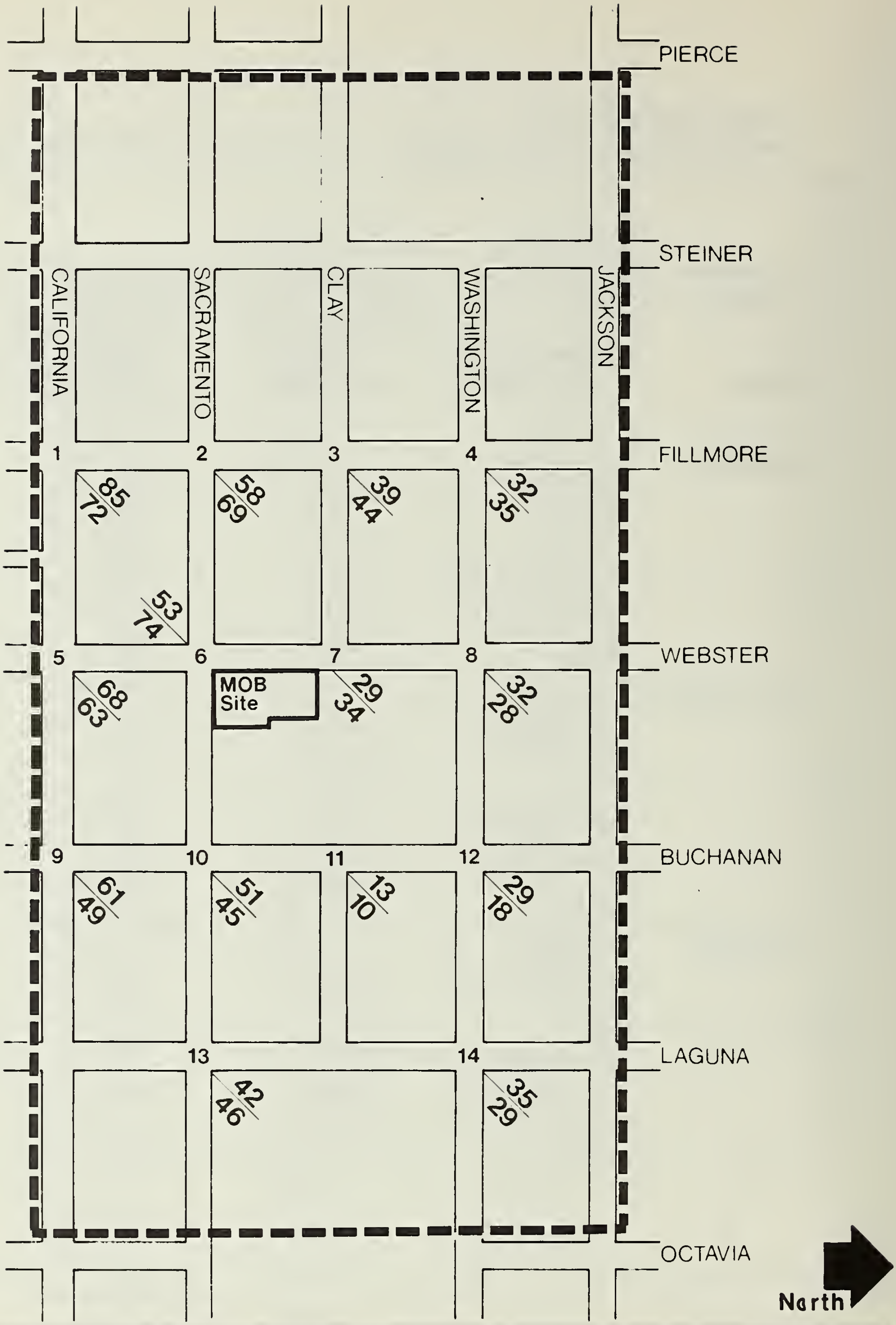

Figure A-5 PROJECTED STREET INTERSECTION PERCENT OF CAPACITY UTILIZATION

61 — AM PEAK HOUR

49 — PM PEAK HOUR

6 INTERSECTION NUMBER

▬ ▬ ▬ PARKING STUDY BOUNDARY

TABLE A-11. COMPARISON OF EXISTING AND FUTURE PEAK HOUR CAPACITY UTILIZATIONS

| | | A.M. PEAK HOUR | | P.M. PEAK HOUR | |
|---|---|---|---|---|---|
| # | Intersection | % of Capacity | Level of Service | % of Capacity | Level of Service |
| 1 | Fillmore & California | 83/85 | C/D | 68/72 | A/A |
| 2 | Fillmore & Sacramento | 56/58 | A/A | 65/69 | A/A |
| 3 | Fillmore & Clay | 38/39 | A/A | 43/44 | A/A |
| 4 | Fillmore & Washington | 32/32 | A/A | 34/35 | A/A |
| 5 | Webster & California | 63/68 | A/A | 52/63 | A/A |
| 6 | Webster & Sacramento | 40/53 | A/A | 52/74 | A/A |
| 7 | Webster & Clay | 26/29 | A/A | 31/34 | A/A |
| 8 | Webster & Washington | 30/32 | A/A | 25/28 | A/A |
| 9 | Buchanan & California | 60/61 | A/A | 42/49 | A/A |
| 10 | Buchanan & Sacramento | 49/51 | A/A | 40/45 | A/A |
| 11 | Buchanan & Clay | 13/13 | A/A | 10/10 | A/A |
| 12 | Buchanan & Washington | 29/29 | A/A | 17/18 | A/A |
| 13 | Laguna & Sacramento | 42/42 | A/A | 46/46 | A/A |
| 14 | Laguna & Washington | 35/35 | A/A | 28/29 | A/A |

Intersection numbers correspond to those shown of Figure A-5.

Legend:

83/85 - % of Capacity (Existing/Existing plus MOB project)
C/D - Level of Service (Existing/Existing plus MOB project)

In summary, the development of the MOB would have its most severe capacity impact at the intersection of Fillmore and California Streets with a change from existing C service level to a future D service level of traffic operations. The actual increased percent utilization is only 2 percentage points. The most severe traffic volume impact would occur in the immediate project vicinity on Webster Street between Clay and California. However, the existing under-utilized condition of the intersection would ameliorate the capacity impact so that no change in service level of traffic operations would occur.

## PUBLIC TRANSPORTATION

### Existing Conditions

The Pacific Medical Center, which encompasses the proposed MOB site, is served by the San Francisco Municipal Railway. Three bus lines criss-cross the immediate area, 2 in an east-west pattern and 1 in a north-south pattern. In addition, 2 other bus lines originate within 3 city blocks of the proposed site.

Figure A-6 presents a regional scale map of the bus lines crossing the study area and indicates their ultimate destinations. As this figure shows, service is extensive. Figure A-7, page 156, presents a map of bus service, including bus lines and bus stops within the MOB study area.

More specifically, the 5 bus lines serving th MOB study area are described as follows:

Line 22, the FILLMORE bus lines originates at the Marina (Fillmore and Chestnut) and runs southbound on Fillmore on its way to the shipyards (Third and Twentieth). The return trip traces approximately the same path, crossing the MOB study area northbound on Fillmore Street.

Line 3, the JACKSON bus line, originates downtown at Sutter and Market Streets and runs westbound along Sutter Street and northbound along Fillmore Street across the MOB study area, turns left at Jackson Street on its way to California Street and Presidio Avenue. The return trip runs eastbound along Jackson and southbound along Fillmore as it crosses the MOB study area.

As designated in the Transportation Element of the San Francisco Master Plan, Fillmore Street is a transit preferential street. Along Fillmore Street, bus lines 3 and 22 provide between 18 and 22 buses per hour during the morning and afternoon peak hour periods. This results in an average headway of about 5 minutes in each direction along the section of Fillmore Street which transverses the MOB study area.

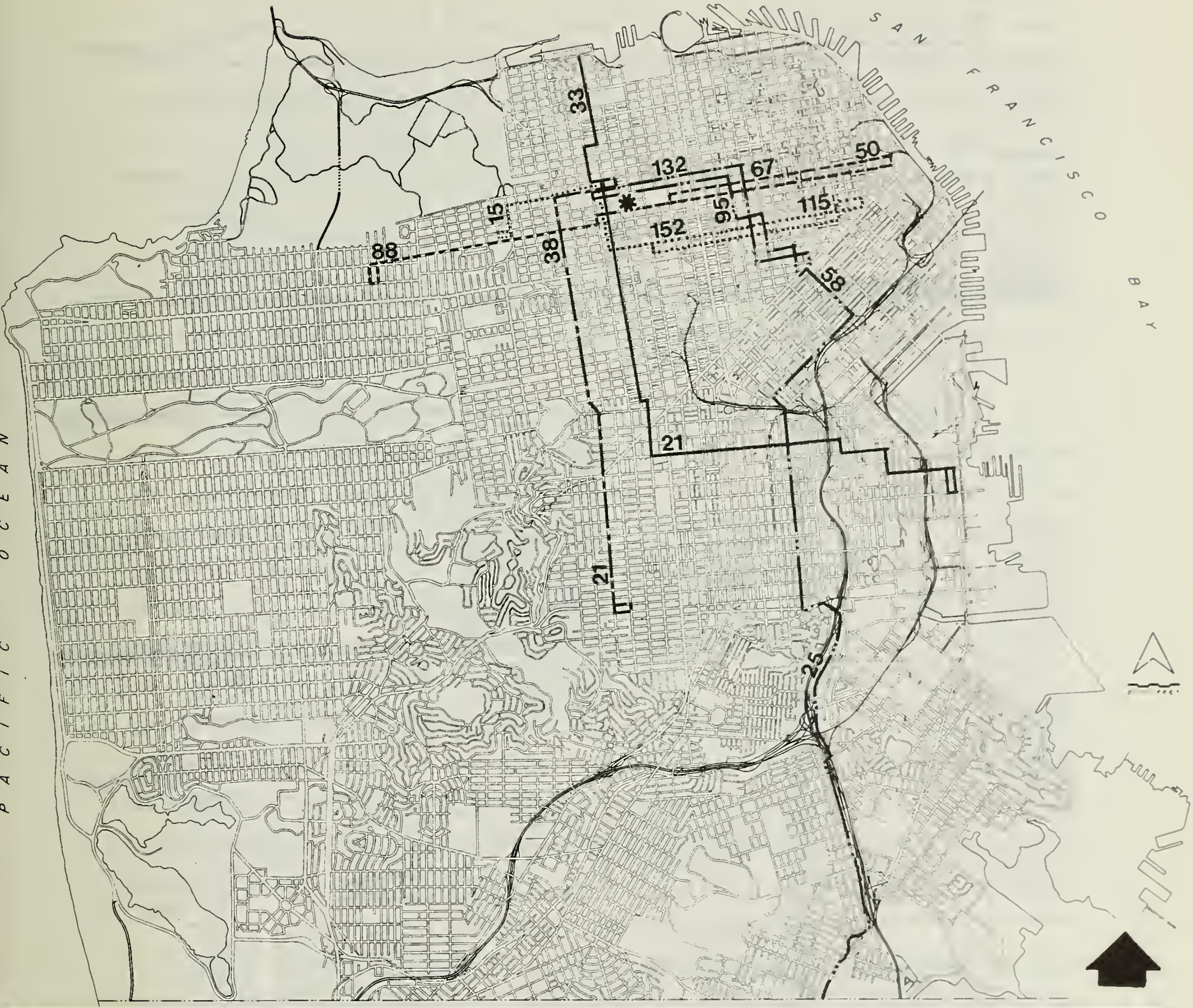

Figure A·6 PMC REGIONAL TRANSIT SERVICE

**88** ESTIMATED DAILY TRANSIT TRIPS ASSOCIATED WITH MOB PROJECT

**✱** MOB SITE

**MUNI LINES**

------ 55 SACRAMENTO

—··— 25 BRYANT

——— 22 FILLMORE

·········· 3 JACKSON

—·— 24 DIVISADERO

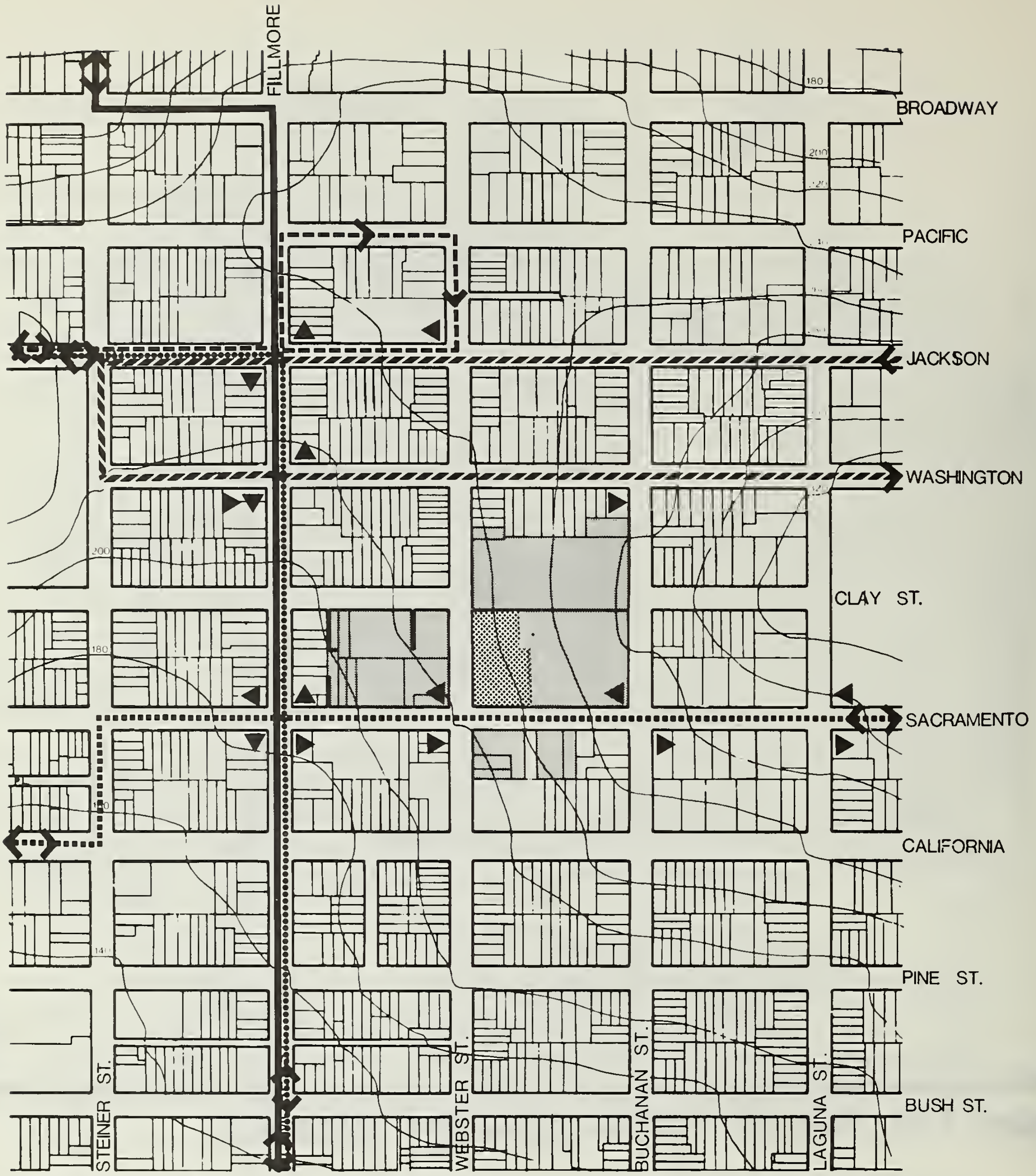

**Figure A·7**
**BUS SERVICE-MOB STUDY AREA**

**MUNI LINES**
┈┈┈ 55 Sacramento
▬ ▬ ▬ 25 Bryant
━━━ 22 Fillmore
┈┈┈ 3 Jackson
- - - - 24 Divisadero

◀ Bus Stop and Service Direction
▒ PMC
▨ MOB Site

SOURCE: SAN FRANCISCO MUNICIPAL RAILROAD

Line 55, the SACRAMENTO bus line, originates downtown at Sacramento and Drumm Streets, runs westbound on Sacramento, south of Steiner in the MOB study area to California, east on California to its western terminus at Sixth Avenue. The return is eastbound along the same route. This line has a variable headway due to increased limited stop service during weekday peak periods. During the morning peak period the resulting average headway is about 3 minutes in the peak direction, eastbound towards downtown, and 9 minutes westbound. In the afternoon peak period the headways are reversed to 9 minutes eastbound and 3 minutes westbound, from downtown.

Line 25, the BRYANT bus line, originates in the immediate vicinity at Fillmore and Jackson, makes a loop and runs eastbound on Washington to Hyde Street, then diagonally and southbound to serve the Bayshore South area with a Cow Palace terminus. The return trip crosses the MOB study area westbound on Jackson Street. The average headway varies from between 7 minutes during the morning peak period to 6 minutes during the afternoon peak periods.

Line 24, the DIVISADERO bus line, also originates in the immediate vicinity at Webster and Jackson and runs westbound on Jackson to Divisadero and thence southbound to its ultimate destination at 26th and Castro Streets. The return trip crosses the MOB study area eastbound along Jackson Street and turns north at the corner at Jackson and Fillmore.

In summary, 5 bus lines, with service throughout the City, are available within a maximum walking distance of 3 blocks from the proposed MOB site. These 5 bus lines combined have a total of approximately 50 buses per hour during peak periods.

The San Francisco Municipal Railway has established a maximum load factor[1] of 1.5 as the standard of service for the diesel buses which serve the MOB area. All 5 of the bus lines serving the area reach the load factor of 1.5 at their maximum passenger load point during the morning and afternoon peak hour periods. Although none of the maximum passenger loading points of the 5 bus lines is within the MOB study area. The 55 Sacramento maintains a 1.5 load factor while operating eastbound within the MOB study area during peak morning hours and both east and westbound during the peak evening hours. The 55 line operates with a 0.5 load factor while travelling westbound in the MOB study area during morning peak periods. During off peak hours the 55 line has a 1.1 load factor for both directions.[1] The load factors for the other 4 bus lines while they are within the MOB study area are discussed below.[2]

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[1] Load factor is a measure of bus usage and is the ratio of the number of passengers on board a bus at a maximum passenger load point to the number of seats provided by the vehicle. A load factor of 1.0 indicates that all available seats ar being used.

The 3 Jackson line while within the study area has peak morning eastbound and westbound load factors of approximately 1.4 and 0.5, respectively. These load factors are reversed during the afternoon peak period.

Th 22, 24, and 25 bus lines all have light morning and afternoon peak load factors within the MOB study area, ranging from 0.1 to 0.5.

As a result of the Planning Operation Marketing (POM) study, Muni has established a Recommended Five Year Plan. Phase IA of the Plan has already gone into effect. The proposed Plan shows the following additional changes to transit service in the MOB area: Line 25 (Bryant) will be removed from the MOB area and its function assumed by existing line 3 (Jackson). Line 55 (Sacramento) will be maintained for peak hour operation only, however, its service area will be picked up by the 1 California trolley coach line, which will travel on Sacramento Street. The other 3 existing bus lines will remain relatively unchanged.

## Transit Impacts

The total number of daily transit trips generated by the MOB would be 546. Of these 546 transit trips, 481 would be generated by patients and 65 by employees. It is assumed that no physicians would use transit. These transit trips would be distributed among the 5 transit lines that pass through or within a convenient distance of the Pacific Medical Center area. The lines are the 3, 22, 24, 25, and

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[1] Angelo Figone, MUNI Patronage Department, telephone conversation of 31 October 1979.

[2] Ibid.

55. Table A-12 shows the distribution of the 546 transit trips among these lines. The lines were further stratified as to their orientation to and from the MOB project. Thus, in Table A-12 route 55 trips designated east of MOB does not mean eastbound travel, but rather trips to and from the project within the eastern sector of the City. Figure A-6, page 155, indicates the daily person volumes on each of the 5 lines cited above.

It is estimated that 360 of the total 546 daily transit trips generated by the MOB would occur during the off peak hours of 10:00 a.m. and 4:00 p.m. The load factors during this period of the 5 bus lines serving the MOB study area indicate that these 349 trips could be accommodated without exceeding the load factor standard of 1.5.

Of the remaining 186 transit trips generated by the MOB it is estimated that 93 would occur in each of the peak hours, morning and evening. Table A-13, page distributes these peak period transit trips among the 5 bus lines in the MOB study area. Although the numbers of MOB generated peak period trips which would be added to these 5 bus lines are small, these lines are currently operating at the threshold load factor level of 1.5 in areas which would be affected by these additional trips. In order to not exceed the 1.5 load factor standard established by Muni, it would be necessary to increase headway frequencies of these 5 lines during the peak periods. If headway frequencies are not increased, this standard would be exceeded.

## PARKING

### Existing On-Street Parking Conditions

A survey of existing on-street parking conditions was conducted during 9 through 12 January 1979 between the hours of 8:00 a.m. and 6:00 p.m. This time period was selected becasue it encompasses the proposed MOB's hours of operation, 9:00 a.m. and 5:00 p.m. A part of this existing conditions survey was a physical inventory of all legal parking spaces in the survey area. Legal parking spaces include all metered and all unmetered, unpainted curb spaces. Unpainted curb spaces that were found vacant during the inventory were assumed to provide one space for every 20 feet of curb length.

TABLE A-12. DISTRIBUTION OF TWO WAY DAILY TRANSIT TRIP ASSOCIATED WITH THE MOB PROJCT

| SFO ZIP CODE AREA | TOTAL TRANSIT TRIPS | LINE 55 |  | LINE 3 |  | LINE 24 | LINE 24 | LINE 22 |  |
|---|---|---|---|---|---|---|---|---|---|
|  |  | East of MOB | West of MOB | East of MOB | West of MOB | South of MOB | South of MOB | North of MOB | South of MOB |
| 102 | 41 |  |  |  |  |  | 20 |  | 21 |
| 103 | 8 |  |  |  |  |  | 8 |  |  |
| 104 | 58 |  |  | 58 |  |  |  |  |  |
| 105 | 8 |  |  | 8 |  |  |  |  |  |
| 107 | -- |  |  |  |  |  |  |  |  |
| 108 | 8 |  |  | 8 |  |  |  |  |  |
| 109 | 74 |  |  | 37 |  |  | 37 |  |  |
| 110 | 25 |  |  |  |  |  | 25 |  |  |
| 111 | 50 | 50 |  |  |  |  |  |  |  |
| 112 | -- |  |  |  |  |  | -- |  |  |
| 114 | -- |  |  |  |  |  |  |  |  |
| 115 | -- |  |  |  |  |  |  |  |  |
| 116 | -- |  |  |  |  |  |  |  |  |
| 117 | 17 |  |  |  |  | 17 |  |  |  |
| 118 | 74 |  | 59 |  | 15 |  |  |  |  |
| 121 | 17 |  | 17 |  |  |  |  |  |  |
| 122 | 25 |  | 12 |  |  | 13 |  |  |  |
| 123 | 33 |  |  |  |  |  |  | 33 |  |
| 124 | -- |  |  |  |  |  |  |  |  |
| 127 | -- |  |  |  |  |  |  |  |  |
| 129 | -- |  |  |  |  |  |  |  |  |
| 131 | -- |  |  |  |  |  |  |  |  |
| 132 | 8 |  |  |  |  | 8 |  |  |  |
| 133 | 17 | 17 |  |  |  |  |  |  |  |
| 134 | 17 |  |  |  |  |  | 17 |  |  |
| South San Francisco | 8 |  |  |  |  |  | 8 |  |  |
| Daly City | -- |  |  |  |  |  |  |  |  |
| East Bay | 58 |  |  | 41 |  |  | 17 |  |  |
| TOTAL | 546 | 67 | 88 | 152 | 15 | 38 | 132 | 33 | 21 |

Source: JDDA

TABLE A-13. MOB GENERATED PEAK PERIOD TRANSIT TRIPS

| BUS LINE | LOCATION | PEAK TIME PERIOD | DIRECTION | TRANSIT TRIPS |
|---|---|---|---|---|
| 55 SACRAMENTO | East of MOB | AM | Eastbound | 0 |
| | | | Westbound | 11 |
| | | PM | East bound | 11 |
| | | | Westbound | 0 |
| | West of MOB | AM | Eastbound | 15 |
| | | | Westbound | 0 |
| | | PM | Eastbound | 0 |
| | | | Westbound | |
| 3 JACKSON | East of MOB | AM | Eastbound | 0 |
| | | | Westbound | 26 |
| | | PM | Eastbound | 26 |
| | | | Westbound | 0 |
| | West of MOB | AM | Eastbound | 3 |
| | | | Westbound | 0 |
| | | PM | Eastbound | 0 |
| | | | Westbound | 3 |
| 24 DIVISADERO | South of MOB | AM | Northbound | 6 |
| | | | Southbound | 0 |
| | | PM | Northbound | 0 |
| | | | Southbound | 6 |
| 22 FILLMORE | North of MOB | AM | Northbound | 0 |
| | | | Southbound | 6 |
| | | PM | Northbound | 6 |
| | | | Southbound | 0 |
| | South of MOB | AM | Northbound | 4 |
| | | | Southbound | 0 |
| | | PM | Northbound | 0 |
| | | | Southbound | 4 |
| 25 BRYANT | East of MOB | AM | Eastbound | 0 |
| | | | Westbound | 22 |
| | | PM | Eastbound | 22 |
| | | | Westbound | 0 |

The on-street parking conditions survey boundary was selected to encompass an area which would accurately represent existing conditions in the vicinity of the proposed MOB. The area included in the on-street parking conditions survey area extends from Pierce Street to Octavia Street, and from California Street to Jackson Street. The boundaries of the area are indicated on Figure A-8.

The results of this survey was summarized in Tables A-14 and A-15. Table A-14 indicates the total number of legal on-street parking spaces available in the area previously described.

TABLE A-14. ON-STREET PARKING INVENTORY

| Street | Section | Total Legal Spaces | Metered | Unpainted |
|---|---|---|---|---|
| California | Pierce to Octavia | 171 | 26 | 145 |
| Sacramento | Pierce to Octavia | 151 | 23 | 128 |
| Clay | Pierce to Octavia | 169 | 26 | 143 |
| Washington | Fillmore to Octavia | 155 | 3 | 152 |
| Jackson | Pierce to Octavia | 169 | 4 | 165 |
| Steiner | California to Jackson | 91 | -- | 91 |
| Fillmore | California to Jackson | 60 | 60 | -- |
| Webster | California to Jackson | 68 | 13 | -- |
| Buchanan | California to Jackson | 77 | -- | 77 |
| Laguna | California to Jackson | 78 | -- | 78 |
| TOTAL | | 1189 | 155 | 1034 |

Table A-15, page 164, indicates the total number of vehicles parked in the parking study area for each hour between 8:00 a.m. and 6:00 p.m., and also lists the number of vehicles illegally parked during this time period. This table shows that the on-street parking operates at about 95% of capacity during the middle of the day. This utilization is somewhat less during the morning hours and begins to drop off after 5:00 p.m.

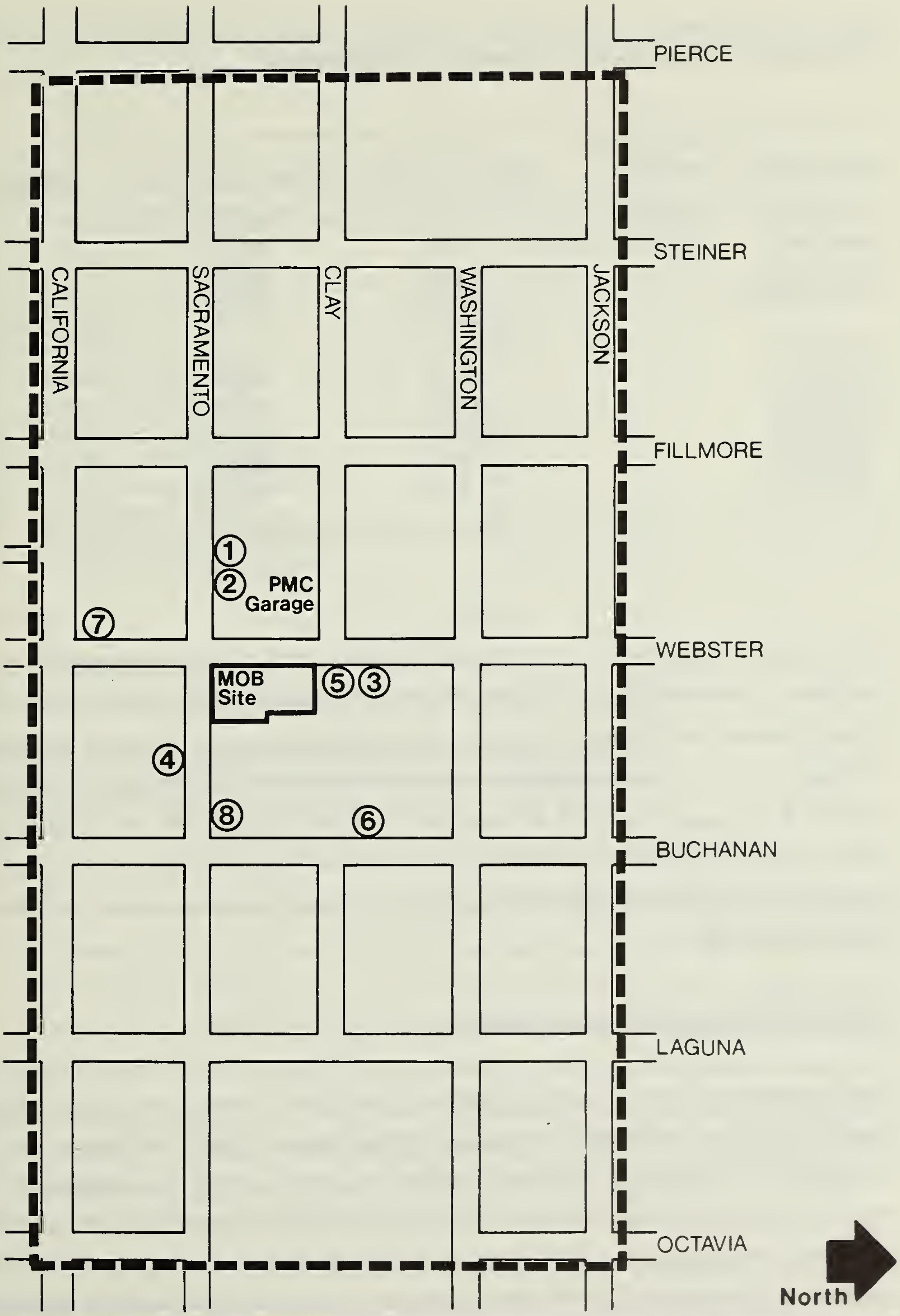

Figure A-8 PARKING FACILITIES MOB STUDY AREA

① SEE TABLE A-16

▬ ▬ PARKING STUDY BOUNDARY

TABLE A-15. ON-STREET PARKING UTILIZATION

| Hour Ending | Total Spaces Available | Legally Parked | Percent Utilization | Illegally Parked |
|---|---|---|---|---|
| 9:00 AM | 1189 | 1069 | 89.9 | 28 |
| 10:00 AM | | 995 | 83.7 | 21 |
| 11:00 AM | | 1014 | 85.3 | 11 |
| 12:00 NOON | | 1032 | 86.8 | 22 |
| 1:00 PM | | 1045 | 87.9 | 28 |
| 2:00 PM | | 1129 | 94.9 | 19 |
| 3:00 PM | | 1120 | 94.2 | 27 |
| 4:00 PM | | 1062 | 89.3 | 16 |
| 5:00 PM | | 970 | 81.6 | 15 |
| 6:00 PM | | 898 | 75.5 | 14 |

The survey indicates that a limited amount of on-street parking is currently available. However, as a practical matter, it should be considered that the on-street parking utilization is at full capacity between the hours of 9:00 a.m. and 4:00 p.m. It is a standard practice in parking anaysis to consider a utilization of over 85% as operating at full capacity. At this magnitude of utilization, long, time-consuming searching maneuvers are required for motorists to find an on-street parking space. These maneuvers also have a generally adverse effect on the traffic flow in the area.

## Existing Off-Street Parking Conditions

The boundary of the on-street parking conditions survey area also defines the boundary of the off-street parking conditions survey area. Off-street parking is provided at a number of locations within this survey area. The largest of these is the PMC parking garage structure which has a design capacity of 395 vehicles. In addition, there are a number of small scattered lots and garages in the area that provide an additional 270 off-street spaces. Many of these smaller facilities are associated with a specific building and function. A list of these small lots and garages and their capacities is shown on Table A-16. Their locations are shown in Figure A-8. Excluded from this listing are residential lots and/or garages and other privately owned, committed spaces, which are unavailable for general public use by PMC doctors, employees, and patrons.

TABLE A-16. INVENTORY OF SMALLER OFF-STREET PARKING LOTS AND GARAGES

| Map #[1] | Facility | Capacity |
|---|---|---|
| 1. | Dentistry Lot | 54 |
| 2. | Dentistry Building | 91 |
| 3. | Research Institutes | 19 |
| 4. | Mental Health Center | 12 |
| 5. | Clay Street Courtyard | 15 |
| 6. | Buchanan Street Lot | 29 |
| 7. | 2300 California Street[2] | 44 |
| 8. | PMC Emergency Court | 6 |
| TOTAL | | 270 |

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[1] See Figure A-8, page 163, for the location of these facilities

[2] This is a privately owned medical office building and is not a part of the PMC campus. However, its size and medical affiliation required its inclusion in this study.

A parking survey was undertaken for the above off-street facilities during the month of January 1979. The smaller facilities were surveyed over a 2 day period and the PMC parking garage was surveyed over a three day period. The purpose of these surveys was to determine the parking characteristics of these facilities and to specifically measure their maximum accumulation of parked vehicles in relation to available parking capacity. Table A-17 summarizes this parking accumulation survey, indicating for each of the smaller facilities and the PMC garage the hourly total vehicles parked and the percent utilization of total capacity.

As indicated on Table A-17, the smaller off-street facilities operate at about 90% of capacity at the time of maximum accumulation. The Pacific Medical Center garage operates at about 10% over its theoretical capacity. These excess vehicles, about 40 above the number of marked spaces, are handled by an informal valet parking operation whereby an attendant parks vehicles in the aisles and moves them about as required. The time of maximum accumulation for all the off-street facilities, 2:00 p.m., coincides with that for on-street parking.

TABLE A-17. OFF-STREET PARKING ACCUMULATION SUMMARY

| | SMALLER FACILITIES | | PACIFIC MEDICAL CENTER PARKING GARAGE | | | |
|---|---|---|---|---|---|---|
| Hour Ending | Parked Total Vehicles | Percent of Capacity | Parked Transient Vehicles[1] | Parked Card Key Vehicles[2] | Parked Total Vehicles | Percent of Capacity |
| 6:00 AM | 41 | 15.2 | 15 | 26 | 41 | 10.4 |
| 7:00 AM | 49 | 18.1 | 24 | 74 | 98 | 24.8 |
| 8:00AM | 94 | 34.8 | 43 | 160 | 203 | 51.4 |
| 9:00 AM | 197 | 73.0 | 104 | 249 | 353 | 89.4 |
| 10:00 AM | 203 | 75.2 | 134 | 280 | 414 | 104.8 |
| 11:00 AM | 225 | 83.3 | 146 | 286 | 432 | 109.4 |
| 112:00 NOON | 214 | 79.3 | 137 | 284 | 421 | 106.6 |
| 1:00 PM | 229 | 84.8 | 154 | 280 | 434 | 109.8 |
| 2:00 PM | 242 | 89.6 | 159 | 276 | 435 | 110.1 |
| 3:00 PM | 237 | 87.8 | 155 | 271 | 426 | 107.8 |
| 4:00 PM | 206 | 76.3 | 135 | 234 | 369 | 93.4 |
| 5:00 PM | 165 | 61.1 | 90 | 178 | 268 | 67.8 |
| 6:00 PM | 88 | 32.6 | 46 | 100 | 146 | 39.6 |
| 7:00 PM | 62 | 23.0 | 34 | 64 | 98 | 24.8 |

[1] Pay on a daily basis.

[2] Pay on a monthly basis.

Persons parking in the PMC garage are composed of 2 types of parkers, transients who pay daily by time parked, and the permanent card-key holders who pay by the month. The ratio of parkers is about 65/35 in favor of card-key holders. The card-key holders, as expected, park for a longer time duration than the transients. They completely utilize their spaces by 10:00 a.m. when 280 card-key holders are parked. Between 10:00 a.m. and 3:00 p.m. there is very little variation in the number of card-key holders parked. While unconfirmed, this would tend to indicate an average parking duration of five hours. The transient parkers stay for a much shorter time period. Their daily average is about 2 hours per vehicle. The transient users parking duration can vary quite widely during the day. During the earlier hours, the average stay is short, but becomes increasingly longer at later hours. The average transient parking duration by hour is shown in Table A-18.

TABLE A-18. AVERAGE PARKING DURATION OF TRANSIENT VEHICLES

| Hour Ending | Average Time Parked for Departing Vehicles |
|---|---|
| 10:00 AM | 0 Hrs 45 Min |
| 11:00 AM | 1 " 20 " |
| 12:00 NOON | 1 " 40 " |
| 1:00 PM | 1 " 50 " |
| 2:00 PM | 1 " 30 " |
| 3:00 PM | 2 " 0 " |
| 4:00 PM | 2 " 0 " |
| 5:00 PM | 2 " 30 " |
| 6:00 PM | 4 Hrs + |
| 7:00 PM | 3 " 10 " |

Congregation Sherith Israel is located at the corner of California and Webster, 1 block from the MOB project. During 2 major Jewish Holidays - Rosh Hashana and Yom Kippur - the Congregation makes special arrangements with PMC to utilize their garage to accommodate the unusual demand for parking.

In summary, the off-street parking demand is in excess of the supply during most of the afternoon peak parking hours. Although there are a small number of unused spaces in the smaller off-street facilities, these are mostly reserved for specific users and/or special functions.

## Existing Parking Conditions Summary

The general parking demand in the area of the Pacific Medical Center is currently at or exceeding the available capacity. The on-street demand reaches 95% of available legal spaces. Anyone attempting to find an on-street space is generally required to search in the area for over a 15 minute time period. This also results in adverse effects on the traffic circulation in the area. There is some capacity in the smaller off-street facilities, however, many of these spaces are reserved for special functions. The Pacific Medical Center Garage is currently operating over capacity for 6 hours during the day.

A summary of the existing total parking demand relative to existing total parking capacity is presented in Figure A-9.

## MOB Parking Demand and Supply

From surveys taken in the field for both on- and off-street parking facilities, it is concluded that there is virtually no excess capacity available for any increase in parking demand. Therefore, the parking demand which would be generated by the Medical Office Building could not be accommodated by these existing facilities, and it would be necessary to meet this demand by providing an integral parking garage. The following discussion considers the relationship between MOB parking demand and supply.

Section 151 of the San Francisco Planning Code requires medical offices and out patient clinics to provide 1 parking space for each 300 square feet of occupied floor area. Applying this 1/300 ratio to the total 111,804 square feet of occupied floor area available in the MOB (see Chapter II, Project Description, page 7) results in a Planning Code parking demand of 373 spaces for the MOB.

The parking space standards provided in the Planning Code are approximations based on historical averages and do not necessarily represent the actual parking demand which would be generated by a specific project at a specific location. Therefore, a detailed parking demand analysis was performed for the MOB to more accurately estimate its specific parking requirements based on the characteristics of its user population, i.e. doctors, employees, and patients.

The MOB parking demand was estimated from the MOB user survey previously described at page 159. The total parking demand consists of 3 components: patients, employees and doctors. Each of these parking components exhibits varying patterns in terms of hourly accumulation and peaking characteristics. The total MOB parking demand would occur at the time of maximum concurrent demand. This time may or may not coincide with the peak time period of any of the individual components. The following section describes how these individual parking demands were estimated.

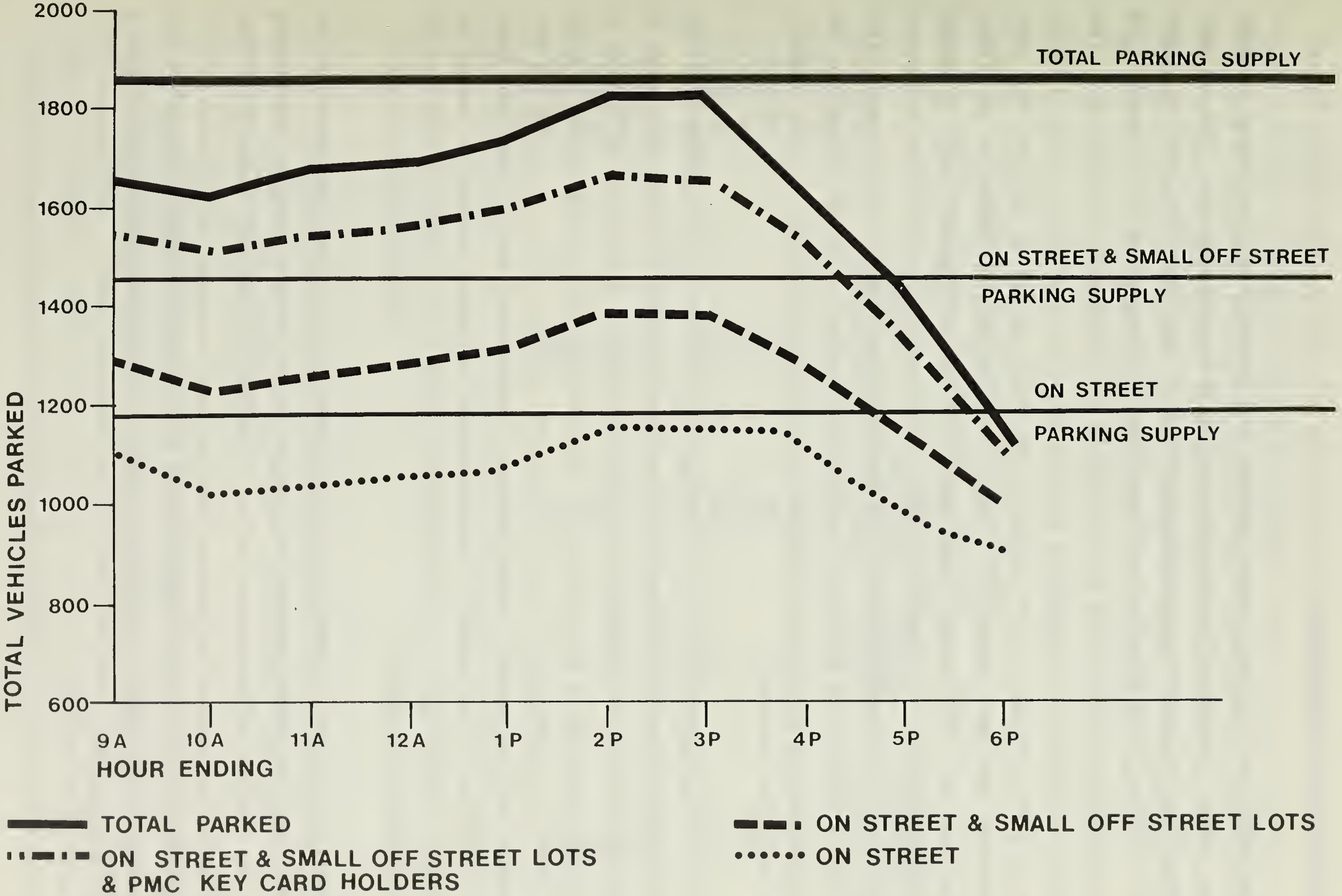

Figure A-9 TOTAL PARKING UTILIZATION- MOB STUDY AREA

## MOB Patient Parking Demand

The MOB patient parking demand estimate was derived from 2 portions of the MOB user survey, the patient questionnaire and the doctor questionnaire. The patients' resonses to the question concerning arrival time were tallied for each 15 minute time period. This tally was not restricted to a single day of the week. All weekdays were used and the total divided by 5 to represent an average day. Two expansion factors were applied to this average day arrival time. The first factor expands the patients return sample to the total number of patients that each physician had seen during the 2 hour time periods, as stated on the office questionnaire. This average 2 hour expansion factor was applied to each 15 minute period during the applicable time frame. The second expansion factor recognizes that not all the projected MOB 125 physicians participated in the survey. This factor is simply total projected physicians over number of doctors responding. All of the resulting data was stratified by the 3 types of practices, i.e. high, medium, or low patient volumes.

The next step was to estimate the average patient visit time. This information was not available directly from the survey and was estimated by noting the number of patients seen by the physician for a given period and dividing by the number of doctors practicing, if more than one. The results of this estimate yielded average patient time duration of 1 hour 15 minutes, 45 minutes, and 30 minutes for the low, medium and high patient volume practices, respectively. Adding these time spans to the arrival times results in the total number of persons entering or leaving the physican offices during any 15 minute time frame, from which a total patient accumulation was derived.

The final step was to estimate how many of these accumulated patients arrived by auto. The survey indicates a varying percent of patients arriving by auto depending on the location of the physician office. It seemed appropriate, in order to simulate probable conditions at the proposed MOB, to use the average vehicle usage percent for offices in the Pacific Medical Center area. As indicated, 69% vehicle use was applied to the number of patients, yielding the estimated parking demand during any time period.

The results of the above described procedures are summarized in Table A-19. For clarity, this table has been condensed from the 15 minute to an hourly basis. As indicated in the table, the vehicle accumulation by hour shows a logical pattern: moderate activity during the mid-morning hours, a sharp decline at noon, and high intensity of activity between 2 and 5 in the afternoon. The hours of maximum accumulation are at 2 and 4 p.m. and range from 96 to 100 parked vehicles.

TABLE A-19. PARKING ACCUMULATION ESTIMATE

| Hours Beginning | Patient Vehicles Parked | Employee Vehicles Parked: Physicians Employees | Employee Vehicles Parked: Ancillary Functions | Total Patient & Employee Parked Vehicles |
|---|---|---|---|---|
| 7:00 AM | 3 | 17 | 1 | 21 |
| 8:00 AM | 6 | 86 | 6 | 98 |
| 9:00 AM | 19 | 101 | 7 | 127 |
| 10:00 AM | 50 | 103 | 7 | 160 |
| 11:00 AM | 59 | 106 | 8 | 173 |
| 12:00 NOON | 14 | 111 | 8 | 133 |
| 1:00 PM | 37 | 107 | 8 | 152 |
| 2:00 PM | 96 | 106 | 8 | 210 |
| 3:00 PM | 81 | 103 | 7 | 191 |
| 4:00 PM | 100 | 92 | 7 | 199 |
| 5:00 PM | 63 | 22 | 2 | 87 |
| 6:00 PM | 5 | 3 | 0 | 8 |

Employee Parking Demand

Employee parking demand must be divided into 2 components, demand generated by employees working directly for physicians, and demand generated by employees associated with ancillary MOB functions.

Physicians employee parking demand was relatively simple to extract from the survey. The office questionnaire included a question as to the working hours of all offices surveyed. These responses were tallied for each hourly period from 6:00 a.m. to 8:00 p.m. These sample responses were converted to a percentage of the total sample and applied to the total amount of employees expected to work at the Medical Office Building. Based on a ratio of 1.3 employees per doctor, it is estimated that a total of 163 employees would be employed at the proposed Medical Office Building.

Approximately 11,250 square feet of MOB space would be devoted to laboratory pharmacy, and x-ray functions employing 11 persons. Patrons of these ancillary functions are assumed to be patients of MOB physicians, and therefore their parking demand has already been analyzed above.

It is assumed that the vehicle modal choice of these 2 MOB employee groups would be the same as that currently displayed by employees of physicians whose offices are located either within PMC facilities or in their immediate vicinity, i.e., 68% of the MOB employees would drive to work and park.

The percentage distribution of arrivals and departures of these current PMC physicians employees was also applied to MOB employees to determine that over 90% would arrive between 8:00 and 9:00 a.m. and depart between 5:00 and 6:00 p.m. This characteristic results in a rather constant number of cars parked during the 9:00 a.m. to 5:00 p.m. time span. The maximum accumulation occurs at 12:00 noon, as shown in Table A-19.

### Doctor's Parking

For the purpose of the MOB parking demand study, all physicians were assumed to have an individual space rented on a monthly basis. It is possible that all these 125 spaces would not be utilized by the physicians on any given day. However it is believed that this assumption is the most logical and results in the most conservative estimate of MOB parking demand.

### Total MOB Parking Demand

Based on survey data, the estimated peak hour concurrent employee and patient parking demand is 210 spaces, occurring at 2:00 p.m. This concurrent peak demand plus the 125 spaces reserved for the physicians gives a total maximum parking demand estimate for the MOB of 335 spaces.

## MOB Parking Impacts

There is virtualy no unutilized on- or off-street parking capacity in the Pacific Medical Center area. Therefore, it would be necessary for the parking demand generated by the MOB to be accommodated by its own off-street facility. The proposed MOB parking facility is designed to provide 288 parking spaces. This leaves an overall MOB parking demand vs supply deficit of 49 spaces (335 - 288 = 47). However, this estimate of parking demand, 335 spaces, may be high for reasons discussed in the "Reduction of MOB Impacts" section of this Appendix, page 174. In addition, 2 on-street parking spaces would be eliminated in order to provide access to the MOB garage.

There are factors which could be considered for possible reductions in MOB parking demand and therefore in the required parking spaces. It could be demonstrated that a supply of less than 1 space per doctor is acceptable. Traffic management proposals could be instituted. These include a differential cost structure, encouraging carpools, and providing a shuttle service for employees between the MOB and a remote parking site. Any of these measures would have an impact on the amount of required parking spaces. They are, however, difficult to implement in some cases.

## BICYCLE USE

There is no apparent bicycle use in the project area. The San Francisco Comprehensive Master Plan has designated a bike route which enters the project area at the intersection of Clay and Pierce, then travels east on Clay to Steiner, north on Steiner to Washington, east on Washington to Webster, north on Webster to Pacific, east on Pacific out of the study area. At present, this designated route has not been established by bike route signs

## REDUCTION OF IMPACTS

Oren L. Reinbolt, Director of Plant and Systems,[1] and Frederick C. Meyer, Executive Vice President[2] of PMC have stated that 38 physicians currently occupying approximately 17,100 square feet of medical offices in the PMC facilities would relocate their offices from PMC to the MOB upon completion of the MOB construction. Four physicians new to the PMC campus would move into 2,550 square feet of the space vacated by the 38 physicians. Two-thirds of the remaining 14,600 square feet of space would be used to alleviate crowded office conditions in the general support functions of the PMC and would be reoccupied by 65 administrative personnel who already work at the PMC campus. The remaining 4,800 square feet of space would be allocated to 32 new administrative support personnel.

Although 32 new administrative personnel would be added to the PMC campus, the effective result would be a reduction in the "worst case" MOB transportation and parking impacts discussed in the preceding 4 sections because these 34 (38 vacating physicians minus 4 new physicians) physicians, their employees, and their patients are already in the area and have been included and accounted for in the existing conditions section of the transportation analysis. This reduction in MOB impacts would not, however, result in an improvement in existing parking and transportation conditions.

Figure A-10 graphically presents the reductions in worst case MOB impacts as discussed above. Table A-20 presents the net Daily and Peak Period Vehicle Trip Generation Reductions that would result from the PMC/MOB transfer assumption. As indicated in this table, the net reduction would approximate a 20% reduction in traffic volumes during all time periods. Since the distribution and assignments are common to all trips, this would amount to a 20% reduction on all the impacts identified in the previous section of this report. This 20% reduction applies to all forecast volumes as well as to differences between existing and future intersection utilization measures.

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[1] Oren L. Reinbolt, Director of Plant and Systems, PMC, memorandum of 13 December 1978 to Dr. Robert Webster, Pan-Med, Ltd.

[2] Frederick C. Meyer, written communication, of 14 February 1979.

TABLE A-20. NET DAILY AND PEAK PERIODS VEHICLE TRIP GENERATION REDUCTIONS

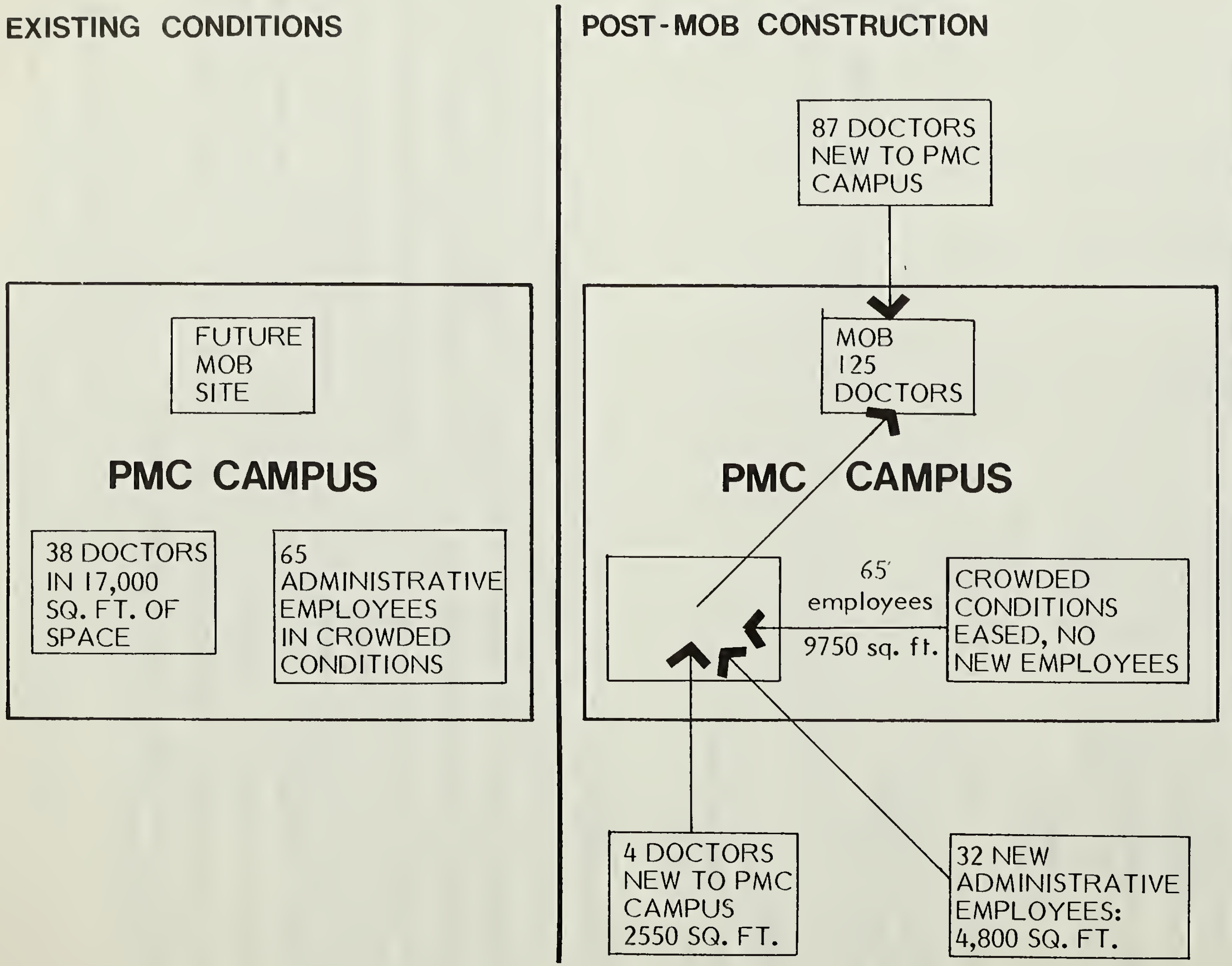
| Generation Basis | Generation Parameter | Two Way ADT | AM Peak Hour IN | AM Peak Hour OUT | PM Peak Hour IN | PM Peak Hour OUT |
|---|---|---|---|---|---|---|
| A - PATIENTS | | | | | | |
| Low | 18 doctors | 55 | | | | |
| Medium | 9 doctors | 110 | | | | |
| High | 7 doctors | 165 | – | – | – | – |
| SUBTOTAL | 34 doctors | 330 | 5 | 2 | 19 | 27 |
| B - PHYSICIANS & EMPLOYEES | 34 doctors | 135 | 40 | 2 | 4 | 42 |
| C - BUSINESS FUNCTIONS | 125 doctors | 135 | 5 | 6 | 2 | 1 |
| TOTAL | N.A. | 600 | 50 | 10 | 25 | 70 |
| Percent of Total Project Related Vehicle Trips | -- | (20) | (22) | (20) | (20) | (21) |

Legend:

600 - vehicle trips
(20) - percent

Source: JDDA

Table A-21, page 171, presents the changes in parking demand based on the assumption that 34 MOB physicians, plus their employees and patients, who now find parking somewhere within the PMC area, would continue to do so after they move to the newly constructed MOB. The result of reducing the number of physicians affecting the parking demand by 34 is a 25% reduction in MOB parking demand. The addition of the new 32 PMC administrative support personnel in part off-sets this reduction and lowers it to a 15% decrease in parking demand. Thus, the overall effect of the PMC/MOB transfer assumption is a lowering in estimated parking demand from 335 spaces to 285 spaces.


EXISTING CONDITIONS
FUTURE MOB SITE
PMC CAMPUS
38 DOCTORS IN 17,000 SQ. FT. OF SPACE
65 ADMINISTRATIVE EMPLOYEES IN CROWDED CONDITIONS
POST-MOB CONSTRUCTION
87 DOCTORS NEW TO PMC CAMPUS
MOB 125 DOCTORS
PMC CAMPUS
65 employees
9750 sq. ft.
CROWDED CONDITIONS EASED, NO NEW EMPLOYEES
4 DOCTORS NEW TO PMC CAMPUS 2550 SQ. FT.
32 NEW ADMINISTRATIVE EMPLOYEES: 4,800 SQ. FT.

**NET CHANGE IN "WORST CASE" ANALYSIS**

- Real additions of 91 doctors, plus employees and patients, instead of 125 doctors reduces transportation and parking impacts
- These reductions in worst case analysis MOB impacts are off-set in part, but not totally, by the addition of 32 new employees to PMC campus
- Net result is reduction in worst case analysis of MOB impacts

Figure A-10 REDUCTION OF WORST CASE ANALYSIS MOB IMPACTS

TABLE A-21. COMPARISON OF REVISED AND ORIGINAL PARKING DEMAND

| | | Parking Demand | |
|---|---|---|---|
| Type of Practice | | Revised Estimate | Original Estimate |
| Low Volume | | 7 | 14 |
| Medium Volume | | 45 | 52 |
| High Volume | | 22 | 30 |
| Patient Sub-Total | Peak accumulation | 74 | 96 |
| Physician Employees | 2:00 p.m. | 80 | 106 |
| Doctors | | 91 | 125 |
| SUBTOTAL | | 245 | 327 |
| Ancillary Function Employees | | 8 | 8 |
| Additional Hospital Use | | 32 | -- |
| TOTAL | | 285 | 335 |

Source: JDDA

Applying the PMC/MOB transfer assumption to estimated parking demand the parking supply provided by the MOB would be three spaces more than the MOB generated parking demand (288 - 285 = 3 spaces). In any event, construction of the MOB garage would remove 2 on-street parking spaces from the existing supply.

## GENERALIZED IMPACTS OF PMC MASTER PLAN

This section is intended to present a generalized order of magnitude description of the impacts that would occur as a result of the implementation of the PMC Institutional Master Plan. The purpose of this analysis is to provide a context for consideration of MOB impacts as they would relate to being a portion of an overall master plan.

The source of this analysis is the PMC Institutional Master Plan 1977-1987 (PMC Plan) and the assumptions contained herein are intended to reflect same. However, due to the complexity of the PMC Plan document, the assumptions of this section were distilled into Table A-22. This table presents the assumed net facility expansion increments (in gross square feet of floor area) that would result if the

PMC Plan were implemented. These net facilities expansion increments were calculated by substracting the gross square feet of floor area of existing facilities from the gross square feet of floor area of the proposed facilities which would replace them.

It should be noted that the Ambulatory Care Center (AC) development element has been specifically excluded from these PMC Plan assumptions. The proposed MOB project and its description in other sections of this EIR is intended to represent and replace the PMC Plan's proposed AC building.

TABLE A-22. PMC PLAN - ASSUMED NET LAND USE INCREMENTS*

| | |
|---|---|
| H-1, 2 Hospital | |
| H1 | 55,000 SF |
| H2 | 149,000 SF |
| 530 Beds | |
| 106 Parking Spaces | |
| Education, Research and Administrative (ERA) | |
| = | 52,500 SF |
| 94 Parking Spaces | |
| School of Dentistry (D2) | |
| = | 46,00 SF |
| 35 Parking Spaces | |
| Education/Research Facility (ER) | |
| = | 68,000 SF |
| 51 Spaces + 85 Cars Removed From Garage | |
| Expansion of Health Sciences Library Site | |
| = | 30,00 SF |
| 23 Parking Spaces | |

*The Ambulatory Care Center (AC) development element has been deleted. This information was described in detail as the MOB throughout this report.

Source: PMC Institutional Master Plan 1977-1987

## TRAFFIC IMPACTS

Average daily vehicular trip generation rates were extracted from the Institute of Traffic Engineers and the California Department of Transportation research files. These rates are presented in Table A-23.

TABLE A-23. PMC INSTITUTIONAL MASTER PLAN TRIP GENERATION RATES (Two Way Average Daily)

| | |
|---|---|
| Hospital | 17.0 per thousand square feet |
| Educational, Research Administrative (ERA) | 9.0 per thousand square feet |
| School of Dentistry (D2) | 3.0 per student |
| Educational/Research Facility (ER) | 9.0 per thousand square feet |
| Health Service Library | 28.0 per thousand square feet |

Source: (1) Trip Generation - Institute of Transportation Engineers
(2) Trip Ends Generation Research Counts - California Department of Transportation

The application of these rates to the assumed PMC Plan net facility expansion increments resulted in an estimate of travel demand. This estimate by facility is presented in Table A-24. As indicated, the implementation of the PMC Plan is expected to result in a total increase in 2-way vehicular daily traffic demand in the order of 5,700 trips. These PMC Plan related vehicular trips will occur in addition to the existing traffic volumes within the PMC/MOB surrounding area plus the forecasted 3,000 MOB project related vehicular trips.

TABLE A-24. PMC INSTITUTIONAL MASTER PLAN TRAFFIC AND PARKING DATA

| Facility | TSF Gross | Average Daily Trip Generation | Parking Forecast Parameter | Code Parking Rate | Code Required Spacers |
|---|---|---|---|---|---|
| Hospital (H1,H2) | 204.0 | 3490 | 530 Beds | 1/5 Beds | 106 |
| Educational, Research and Administration (ERA) | 52.5 | 470 | 39.4 TSF | 1/1 TSF | 35 |
| School of Dentistry (2) | 46.0 | 290 | 34.5 TSF | 1/1 TSF | 35 |
| Educational/Research Facility (ER | 68.0 | 610 | 51.0 TSF | 1/1 TSF | 51 |
| Health Service Library | 30.0 | 840 | 22.5 TSF | 1/1 TSF | 230 |
| SUBTOTAL (New spaces for new uses) | | | | | 254 |
| Removal Parking Spaces from School of Dentistry<br>Garage - 85 spaces<br>Lot - 54 spaces | | | | | 139 |
| TOTALS | 400.5 | 5700 | N.A. | N.A. | 393 |

Finally, Table A-25 presents an order of magnitude estimate of PMC Plan related daily traffic volume increases on an invisible cordon around the PMC Plan area. This table shows forecasted versus existing traffic volumes on 8 streets at 2 locations on each street and presents calculated percent increases over existing conditions.

## PARKING IMPACTS

City Planning Code required parking rates were extracted from the PMC Institutional Plan document, and are summarized in Table A-24.

The application of these code requirement rates to the assumed PMC Plan net facility expansion increments resulted in an estimate of code required parking spaces for the PMC Plan. Table A-24 shows a sub-total code requirement of 254 spaces, plus a requirement to replace 139 new parking spaces. As indicated, these are Code required spaces. In most cases, actual parking demands are somewhat lower than requirements and thus, these 393 spaces may be thought of as a maximum parking demand of the PMC Plan.

## TABLE A-25. LONG RANGE DEVELOPMENT PLAN GENERALIZED TRAFFIC IMPACT

| Street | | Added Project Related Two Way Traffic Daily | | Existing Two Way Daily Traffic | Percent Increases in Volume Daily | |
|---|---|---|---|---|---|---|
| | | MOB | PLAN | | MOB | PLAN |
| California | @ Fillmore | 390 | 740 | 12,700 | 3.1 | 8.9 |
| Sacramento | | 140 | 280 | 5,600 | 2.5 | 7.5 |
| Clay | | 65 | 120 | 2,800 | 2.3 | 6.6 |
| Washington | | 30 | 60 | 1,600 | 1.9 | 5.6 |
| SUBTOTAL | | 650 | 1,200 | 22,700 | 2.8 | 8.1 |
| Fillmore | @ Washington | 70 | 140 | 7,200 | 1.0 | 2.9 |
| Webster | | 260 | 500 | 5,400 | 4.8 | 14.1 |
| Buchanan | | 60 | 120 | 2,700 | 2.2 | 6.7 |
| Laguna | | 15 | 40 | 4,600 | 0.3 | 1.2 |
| SUBTOTAL | | 405 | 800 | 19,900 | 2.0 | 6.1 |
| Washington | @ Laguna | 55 | 100 | 1,600 | 3.4 | 9.7 |
| Sacramento | | 110 | 200 | 5,600 | 2.0 | 5.5 |
| California | | 420 | 800 | 12,700 | 3.3 | 9.6 |
| SUBTOTAL | | 585 | 1,100 | 19,900 | 3.0 | 8.5 |
| Laguna | @ California | 40 | 70 | 4,600 | 0.9 | 2.4 |
| Buchanan | | 210 | 400 | 2,700 | 7.8 | 22.6 |
| Webster | | 1,000 | 1,900 | 5,400 | 18.5 | 53.7 |
| Fillmore | | 135 | 230 | 7,200 | 1.9 | 5.1 |
| SUBTOTAL | | 1,385 | 2,600 | 19,900 | 7.0 | 20.0 |
| GRAND TOTAL | | 3,000 | 5,700 | 82,400 | 3.7 | 10.6 |

## TRANSPORTATION TERMINOLOGY

| | |
|---|---|
| ADT | (Average Daily Traffic) Total volume of traffic crossing a fixed point over a 24-hour period, averaged over a month, a year or several years. |
| Accessibility | The relative ease with which a location can be reached via various modes of transportation. |
| Arterial Road | A major roadway with partial control of access. |
| Capacity | Maximum number of vehicles, riders (transit) that can be carried during a determined period of time. |
| Collector Road | A roadway with uncontrolled access connecting arterials and freeways to local streets and private residences and businesses. |
| Directional Split | The difference in magnitude between volumes in one direction and volumes in the opposite direction on a road segment. |
| Level of Service | Level of service expresses the conditions existing under various speed and volume conditions on any highway or street. These levels of service, designated A through F, from best to worst, cover the entire range of traffic operations that may occur. On many specific streets and highways, the better levels cannot be attained. Level of service E describes conditions approaching and at capacity (that is, critical density). |
| Model Split or Mode Split | The relative proportion of trips by each mode. For example, if 4 out of 100 trips from point A to Point B were made by bus and 96 by auto, the bus and auto mode splits would by 4 percent and 95 percent respectively. |
| Mode of Travel | Mode of travel is the means of transportation, whether by bus, car, subway, etc. |
| Peak Hour(s) | The 60 minute period(s) in which volume on traffic is highest for the day. The peak hours are typically around 7 to 9 a.m. and 4 to 6 p.m. |
| Peak Hour/Peak Direction Factor | Percent factor expressed peak hour/peak direction traffic as proportion to ADT. |
| Peak Hour/Peak Direction Traffic | Highest peak hour traffic of both directions. |

| | |
|---|---|
| Uncontrolled Access | No limit to the number of accesses to the roadway is established. |
| Volume/Capacity Ratio, V/C Ratio | The ratio of volume of traffic to capacity for a road or road segment. The V/C ratios are useful to estimate levels of service and congestion. |

## APPENDIX B. NOISE

### DIMENSIONS OF SOUND AND THEIR MEASUREMENT

Three dimensions of sound are important in determining the subjective, human response to environmental noise. These are:

- the intensity or level of the sound;
- the frequency spectrum of the sound; and
- the time-varying character of the sound.

O (zero) dB corresponds roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or Hertz (Hz). Most of the sounds which we hear in the environment do not consist of a single frequency, but of a broad band of frequencies, differing in level. The quantitative expression of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into 9 segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Fortunately, the simplest method correlates with the observed human response as well as the more complex methods (Parkin 1964, Hillquist 1967, Galloway et al 1969, Botsford 1969). This method consists of evaluating all of the content of a sound in accordance with a weighting that progressively and severely deemphasizes the importance of frequency components below 1,000 Hz, with mild deemphasis above 5000 Hz. This type of frequency weighting reflects the fact that human hearing is less sensitive at low and extremely high frequencies than at midrange frequencies. The weighting curve which is most often used is called "A" weighting, and the level so measured is called the "A-weighted sound level," or simply "A-level."

The A-level in decibels is expressed "dBA"; the appended letter "A" represents the particular kind of weighting used for the measurement. In practice, the A-level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. All U.S. and international standard sound level meters include such a filter. Typical A-levels measured in the environment and in industry are shown in Table B–1.

Although the A-level may adequately describe sound levels at any instant in time, the fact is that the environmental noise level varies continuously. Most environmental noise includes a conglomeration of distant sound sources which create a relatively steady background noise in which no particular sound source is identifiable. These distant sources may include traffic, wind in trees, industrial activities, etc. These sound sources are relatively constant from moment to moment, but vary slowly from hour to hour as natural forces change or as human activity follows its daily cycle. Superimposed on this slowly varying background noise is a succession of identifiable sound events of brief duration. These may include nearby activities or single vehicle passages, aircraft flyovers, etc., which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, the statistical sound level descriptors $L_{10}$, $L_{50}$, and $L_{90}$ are commonly used (Kittelson et al 1964, Griffiths et al 1968, Olson 1970, Scholes 1970, Gordon et al 1971). The $L_{10}$, as used in this report, is the A-weighted sound level equaled or exceeded during 10% of a stated time period. The $L_{10}$ is considered a good measure of the "average peak" noise. The $L_{50}$ is the A-weighted sound level that is equaled or exceeded 50% of a stated time period. The $L_{50}$ represents the median sound level. The $L_{90}$ is the A-weighted sound level equaled or exceeded during 90% of a stated time period. The $L_{90}$ is used to describe the background noise.

Since it is often cumbersome to describe the noise environment with these statistical descriptors, a single number descriptor called the $L_{eq}$ is becoming widely used. The $L_{eq}$ is defined as the equivalent steady-state sound level which in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. The $L_{eq}$ is particularly useful in

TABLE B-1: TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND IN INDUSTRY

| | Decibels A-Weighted | |
|---|---|---|
| CIVIL DEFENSE SIREN (100') | 140 | |
| JET TAKEOFF (200') | 130 | THRESHOLD OF PAIN |
| | 120 | |
| RIVETING MACHINE | 110 | ROCK MUSIC BAND |
| EMERGENCY ENGINE-GENERATOR (6')<br>DC-10 FLYOVER (700) | 100 | PILE DRIVER (50') |
| SUBWAY TRAIN (20') | 90 | BOILER ROOM<br>PRINTING PRESS PLANT |
| PNEUMATIC DRILL (50') | 80 | GARBAGE DISPOSAL IN HOME (3')<br>INSIDE SPORTS CAR, 50 MPH |
| FREIGHT TRAIN (100')<br>VACUUME CLEANER (10')<br>SPEECH (1') | 70 | |
| | 60 | AUTO TRAFFIC NEAR FREEWAY<br>LARGE STORE<br>ACCOUNTING OFFICE |
| LARGE TRANSFORMER (200') | 50 | PRIVATE BUSINESS OFFICE<br>LIGHT TRAFFIC (100')<br>AVERAGE RESIDENCE |
| | 40 | MINIMUM LEVELS, RESIDENTIAL AREAS IN SAN FRANCISCO AT NIGHT |
| SOFT WHISPER (5') | 30 | |
| RUSTLING LEAVES | 20 | RECORDING STUDIO |
| | 10 | |
| THRESHOLD OF HEARING IN YOUTHS (1000-4000 Hz) | 0 | |

NOTE: The distance (in feet) between the source and listener is shown in parenthesis.

describing the subjective change in an environment where the sources of sound remain the same, but there is change in the levels of activity. Widening roads and/or increasing traffic are examples of this kind of situation.

In determining the daily measure of environmental noise, it is important to account for differences in the human response to daytime and nighttime noises.

During the nighttime, exterior background noises are generally lower than the daytime levels. However most household noise also decrease at night and therefore exterior noises become very noticeable. Also, most people are sleeping at night and are very sensitive to noise intrusion.

To account for human sensitivity to nighttime noise levels, a descriptor, $L_{dn}$ day-night equivalent sound level, was developed. The $L_{dn}$ divides the 24-hour day into the daytime, 7 a.m. to 10 p.m., and the nighttime, 10 p.m. to 7 a.m. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The $L_{dn}$ then is the A-weighted average sound level in decibels during a 24-hour period with a 10 dB weighting applied to nighttime. For highway noise environments, the $L_{eq}$ during the peak traffic hour is approximately equal to the $L_{dn}$.

## HUMAN IMPACTS OF ENVIRONMENTAL NOISE

The effects of noise on people can be listed in three general categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speaking, sleeping, learning; and
- physiological effects such as startle, hearing loss.

The sound levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Unfortunately, there is as yet no completely satisfactory measure of the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise related to differing individual past experiences with noise (Stevens *et al* 1955).

Thus, an important parameter in determining a person's subjective reaction to a new noise is the existing noise environment to which one has adapted: the so-called "ambient" noise. "Ambient" is defined in the San Francisco Noise Ordinance as "the all-encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far" (S. F. Municipal Code, 1972). In general, the more a new noise exceeds the previously existing ambient, the less acceptable the new noise will be judged by the listeners (Galloway *et al* 1969).

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the sections of this report which address environmental noise (Stevens *et al* 1955, Beranek 1954):

a) Except in carefully controlled laboratory experiments, an increase of only 1 dB in A-level cannot be perceived.

b) Outside of the laboratory, a 3 dB increase in A-level is considered a just-noticeable difference.

c) A change in A-level of at least 5 dB is required before any noticeable change in community response would be expected.

d) A ten-dB increase in A-level is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response. Increases of more than 10 decibels would be expected to provoke complaints.

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# APPENDIX C - AIR QUALITY ASSUMPTIONS AND METHODOLOGY

## CARBON MONOXIDE CALCULATIONS

The model used for these calculations were developed by the Bay Area Air Quality Management Control District[1] and consists of two superimposed line sources. Meteorological conditions assume a 1 meter per second, and 2 meter per second wind blowing at a 22½ degree angle to the roadway for the 1- and 8- hour periods, respectively. Use of this model provides conservative estimates, as it is a physical impossibility to have a wind blowing at the same angle to both roadways simultaneously.

Traffic volumes at each intersection analyzed were provided by the project traffic consultant (see Appendix A, Transportation). Peak-hour volumes were provided. Peak eight-hour volumes were estimated at 55% of the Average Daily Traffic (ADT).

Emission rates for carbon monoxide are partially determined by vehicle speed. Speeds were assumed to be 10 mph for the peak hour and 20 mph for the peak 8–hour period.

## REGIONAL EMISSIONS CALCULATION

The project traffic engineer provided information on auto trip generation for the project and the estimated distribution of their origin. Regional VMT is calculated by multiplying trips by their average trip length. The calculation of VMT is shown below.

---

[1] BAAGMD Guidelines for the Air Quality Impact Analysis of Projects, June 1975.

| Trip Origin | % of Total Trips | Two-Way Distance | VMT Contribution |
|---|---|---|---|
| San Francisco | 58.7 | 10 | 17,610 |
| South San Francisco | 2.1 | 15 | 945 |
| Daly City | 3.1 | 15 | 1,395 |
| East Bay | 17.8 | 30 | 16,020 |
| Marin County | 11.0 | 30 | 9,900 |
| Peninsula | 7.3 | 40 | 8.760 |
| Total | | | 35,970 |

EMISSION FACTOR

Emission factors are available from published sources.[1] For this analysis, emission factors have been revised to reflect more recent data on emissions.[2] The derivation of emission factors used in this analysis is described below.

| | BAAQMD[1] Emission Factor for 1980 | Correction Factor[2] | Emission Factor at: | | |
|---|---|---|---|---|---|
| Pollutant | | | 10 mph | 20 mph | 25 mph |
| Carbon monoxide | 16.8 g/mi | 1.41 | 35.5 | 23.7 | 19.0 |
| Hydrocarbons | 2.4 g/mi | 1.10 | -- | -- | 2.2 |
| Oxides of nitrogen | 2.8 g/mi | 0.94 | -- | -- | 2.8 |

---

[1] Bay Area Air Quality Management District, Guidelines for the Air Quality Impact Analysis of Projects, June 1975.

[2] Association of Bay Area Governments, ABAG, memo from Ron Wada to Mike Kim, concerning revision of emission factor due to EPA Supplement 8, dated 18 July 1977.

# APPENDIX D - ANALYSIS OF SAN FRANCISCO URBAN DESIGN PLAN AND ITS RELATIONSHIP TO THE PROPOSED MOB

## URBAN DESIGN PLAN MAPS

### City Pattern Policies

1. The Pacific Medical Center area is listed as an area "where new landscaping is to be installed or encouraged." P. 37. (All page citations are to the San Francisco Urban Design Plan.)

   The MOB plan indicates conformity with this policy.

2. The Pacific Medical Center area is shown in the "Plan for Street Landscaping and Lighting" as an "informal design" area, with variation in species, design and spacing of landscaping and theme trees for districts. P. 40-41. Also, standards for street lighting appropriate to area are specified at p. 40.

   The MOB plan indicates conformity with this policy.

### Conservation Policies

1. Pacific Medical Center area is shown as an "area of high cencentration of structures of historic or architectural merit." P. 48.

   Does not directly apply to MOB except that surrounding Victorian structures may have some influence on MOB design in regard to scale, form, etc.

2. Pacific Medical Center area is listed as an area with an "outstanding and unique quality of visual form and character." P. 49.

   See comment for Policy 1, above.

3. Clay Street between Lafayette Park and Alta Plaza is shown as "street important to perception of the city" in that it is a street which "extends the effect of public open space" (because views of Alta Plaza are possible along it). P. 50.

   Clay Street opens views to Alta Plaza from PMC, and from Alta Plaza to PMC. The MOB would not materially change this view.

4. Webster and Buchanan Street are noted as streets "important for the quality of their views--excellent." P. 51.

   Webster Street is the important one here, and the views are primarily to the south. The MOB would not materially affect this view corridor, except to define it more between Clay and Sacramento Streets. The School of Dentistry building already defines it on the west, the MOB would do so on the east side of Webster Street.

5. Pacific Medical Center area is shown as an area where "streets are the most important sources of light, air and open space" and where generalized coverage is 51-75% (block covered with building). P. 52.

   The effects of the MOB on sunlight on the street would be primarily on Webster during the winter morning hours, when shadows from the MOB would fall on the street. There would be a loss of open space feeling as it exists now, with the loss of the vacant lot left by the demolition of the medical buildings which previously occupied the site.

## Major New Development Policies

1. Pacific Medical Center is shown as an area "where tall buildings would have little or moderate effect upon views from nearby buildings." P. 76.

   The MOB, in any case, would not be considered a tall building in relationship to existing PMC buildings.

2. Pacific Medical Center is shown as an area where tall buildings would or "could help define districts or centers." P. 76.

   The MOB would not materially change the visual impact of the PMC, which already visually defines itself as a center.

3. Pacific Medical Center is shown as an area where "medium to high-rise, large-scale buildings in good relation to topography are appropriate." P. 77.

   The MOB would not conflict with this pattern.

4. Pacific Medical Center is shown as an area where tall buildings would have little or no effect upon views from major roadways. P. 78.

   The MOB would not conflict with this statement as it is not a tall building and the area is not visually sensitive to tall buildings in any case.

5. The existing generalized building scale for the Pacific Medical Center area is shown as a mix of small to medium scale. P. 78.

   The MOB would conform to the generalized building scale shown for this area.

6. In the "Urban Design Guidelines for Height" map the proposed MOB and PMC are located in an area in the 0-40' category. P. 93. There is a conflict between this map and the following "Urban Design Guidelines for Bulk" map which shows PMC and the proposed MOB as located in an area of medium scale heights 5-12 stories. It should also be noted that San Francisco Planning Code establishes a height limit of 160 feet for the proposed MOB site. The proposed MOB would be ±78 feet in height.

7. In the "Urban Design Guidelines for Bulk" map the proposed MOB and PMC fall in the category of medium scale - 5-12 stories, where bulk guidelines apply to buildings over 80' in height, limiting maximum plan dimensions to 110' in length and a maximum diagonal plan dimensions of 125'. P. 95.

The guidelines for maximum plan dimensions do not apply because the height of the proposed MOB would not exceed 80'.

Neighborhood Environment Policies

1. The PMC area falls in a "protected residential area" category. P. 125.

   This policy mainly concerns itself with effects and amelioration of traffic in neighborhoods. This subject is addressed in the transportation impacts section of this report.

URBAN DESIGN PLAN POLICIES

City Pattern Policies

Image and Character

Policy 1. Recognize and protect major views.

- Most of the city's high points are either too far away, or have intervening land or building forms blocking views of the project site. There are a few distant viewing points, particularly Alta Plaza Park, from which the proposed MOB would be a visual element. However, the MOB would have a relatively minor visual impact in comparison to the bulk and height of the existing PMC facilities. The introduction of the MOB, of intermediate height, would reduce the apparent height and prominence of the stark white Stanford building.

  The MOB would be more visually prominent and would affect some views from locations nearer the site, particularly Burns Memorial Court and Webster Street, a street which is important for the excellent quality of the views. The terracing of the MOB's west face, along Webster Street, particularly the large inset of the third floor, would minimize view restrictions from Burns Memorial Court.

Policies 2, 3, and 4 are not directly affected by MOB.

- No change in street pattern.
- No disruption of the existing building form relationships.
- Nothing in landscaping plan necessarily in conflict.

Organization and Sense of Purpose

Policies 5, 6 and 7.

- Only relevant if theme landscaping is established for this area.
- Only relevant if theme lighting is estalished for this area.
- Building is not on edge of "district" so no emphasis is needed.

Orientation for Travel

Policy 8. Increase the visibility of major destination areas and other points for orientation.

- PMC is already a prominent feature of the Pacific Heights area. The MOB would probably further increase the visibility of PMC for orientation.

Policy 9. Not applicable.

Policy 10 and 11.

- Again make sure landscaping and street lighting fit into whatever city plans are operative for this area.

## Conservation Policies

### Natural Areas

Policies 1, 2 and 3. Not applicable.

### Richness of Past Development

Policies 4 and 5. Not applicable.

Policy 6. Respect character of older development nearby in design of new buildings.

- MOB would utilize setbacks along Webster Street so that 3rd floor relates in height to older residences on Webster Street. Emphasis on horizontal is attempt to reduce verticality, and terraced or step design breaks up visual length.

Policy 7. Recognize and protect outstanding and unique areas.

- Though this area is listed as one of "outstanding and unique" quality, this refers most probably to the surrounding Victorian residences, street planting, etc, rather than to hospital buildings in PMC, which are of varied sizes, styles and quality. There is a real problem in design in attempting to relate a 5-story office building to surrounding 2-3 story Victorian residential structures, and there is some question whether such should be attempted, since the surrounding PMC buildings already have violated any such relationship. Perhaps a consistency of street treatment plus a form sensitive to the Victorian residential scale is all that is possible.

Policy 8, 9 and 10. Relating to giving up of street space, not applicable.

## Major New Development Policies

Visual Harmony

Policy 1. Promote harmony in the visual relationships and transitions between new and older buildings.

- Much of this has already been covered under Conservation Policies 6 and 7.

Policy 2. Avoid extreme contrasts in color, shape and other characteristics which will cause new buildings to stand out in excess of their public importance.

- The terraced setbacks at the third floor would have several effects. It would minimize the shadow impacts on surrounding structures and public areas and emphasize the third floor height in relation to older residential structures.

- The series of terraces along the west face of the building would break up the visual length, resulting in a scale which would be more compatible with the neighboring structures. The varied positions of projecting glass bays on each floor would provide visual relief from the dominant horizontal lines of the building, and would attempt to relate in spirit to the bays found in neighboring Victorian residential structures.

- The exterior finish of the MOB has not been finally determined, but buff-colored, concrete based, light weight, precast panels, combined with gray glass and broad rust-colored bands, are planned. This exterior finish would be similar to Presbyterian Hospital and the parking garage but in contrast to brick used in parts of surrounding medical buildings, and to the typical stucco, brick and wood finishes which provide the character of the surrounding residential area. (See comment on Conservation Policies, Policy 7, above.)

Policy 3. Not applicable.

Height and Bulk

Policy 4. Not applicable.

Policy 5. Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

- The terraced west facade of the MOB would help form a transition between the taller PMC facilities and the older structures of the neighborhood on the west side only. The north, south and east facades, also visible from residential areas, would not have terraced setbacks. The architects feel the presence of existing large medical buildings on these sides obuiates a terraced treatment.

  The PMC area is shown as an area where "Medium to high rise, large-scale buildings in good relation to topography are appropriate." The hillside topography of the site would help minimize the visual impact of the height of the building.

Policy 6. Relate the bulk of buildings to the prevailing scale of development.

- Although it would be centrally located in the PMC, the MOB would be visible from adjacent residential uses. The bulk of the MOB would relate to the PMC facilities but contrast to the bulk of the residential and commercial structures. The terracing of the west facade of the MOB is designed to visually minimize the size of the building and relate it to neighborhood 2-3 storey residential structures.

Large Land Areas

Policies 7, 8, and 9.

- This is more applicable to the PMC master plan, rather than the MOB as an entity.

## Neighborhood Environment Policies

### Health and Safety

Policy 1. Protect residential areas from the noise, pollution and physical danger of excessive traffic.

- See appropriate sections of this report.

Policy 2, 3 and 4.

- All relate to traffic effects and buffering. See appropriate sections of this report.

### Feeling of Neighborhood

Policies 5, 6 and 7.

- Not applicable to MOB, as they relate to maintenance, neighborhood improvements, etc.

### Opportunity for Recreation

Policy 8, 9, 10, and 11.

- Not applicable to MOB.

Policy 12. Install, promote and maintain landscaping in public and private areas.

- The plans for the MOB indicate street trees on sidewalks, vegetation on terraces and on terraced sidewalk planters. The plantings on terraces would help provide some color, texture and will soften the building facade. The courtyard between the MOB and the Stanford building would be terraced and landscaped to provide a green, vest-pocket park area.

Policy 13. Improve pedestrian areas by providing human scale and interest.

- The proposed project would increase street activity in the area. The terraced sidewalk planters and the landscaped entry plaza of the MOB would provide for color and texture at a pedestrian level. The Pacific Heights neighborhood includes landscaping which is compatibly scaled to the size of neighborhood structures. The architects would provide a landscaping plan which would have street trees of a scale and type consistent with those existing in residential areas of Webster Street, extending the neighborhood planting plan to the MOB.

Policy 14. Not generally applicable.

Policy 15. Protect the livability and character of residential properties from the intrusion of incompatible new buildings.

- The MOB would be within view of residential properties. The west face terracing is designed to emphasize a smaller bulk and the third floor height characteristic of the surrounding neighborhood. The exterior finish of the building, tentatively planned to be buff colored, lightweight precast panels, combined with gray glass and a broad, rust-colored band, will relate to the buildings of the PMC. (See comments on Conservation Policies, Policy 7 and Major New Development Policies, Policy 2, above.)

## APPENDIX E. - PMC INSTITUTIONAL MASTER PLAN

This Appendix focuses exclusively on the PMC Master Plan 1977-1987 for the purpose of more fully describing its methodology, content and current status, relationship to West Bay Health Systems Agency Plan for 1978-1983, and generalized environmental impacts.

### A. PMC LONG RANGE PLANNING PROCESS AND METHODOLOGY

The process and methodology used to prepare the PMC Plan reflects the exigent circumstances of its creation. As provided by the City Planning Code, institutions in San Francisco were required to submit initial master plans by 31 December 1976. In the fall of this year a new administration was appointed to PMC facd with the approaching deadline, the PMC Plan was necessarily created in short order by a relatively small group of new PMC staff, operating under the constraints of both limited time and lack of an in-depth familiarity with the history and evolution of PMC.

Subsequent to the submission of the PMC Plan in 1976, PMC established a Planning Task Force composed of representatives of the Board of Trustees, medical staff, hospital administration, employees, and PMC's affiliated institutions--the Institutes of Medical Sciences, the University of the Pacific and Garden Sullivan Hospital and Rehabilitation Center (affiliated at that time but since merged with PMC). This body was charged with reviewing PMC's role in health care delivery and making appropriate recommendations. This effort was the prelude to the first annual PMC Planning Conference, held in September 1977 to review these recommendations and formulate long-range planning goals and objectives.

With this conference a permanent, long-range planning process was established, consisting of an Annual Conference, Task Forces for specific programs, problems, or plans, Medical Staff and Board of Trustee committees with planning-related assignments, and a Planning Director for over-all coordination. The Board of Trustees, ultimately responsible for decision-making, provides continuous input and periodic review and evaluation of the PMC Planning Process.

PMC's second Annual Planning Conference was held in November 1978. This conference evaluated and revised the PMC goals and objectives established at the 1977 conference. This annual reassessment of goals is regarded by PMC as a vital element of its planning process.

Another important element of the planning process is providing opportunities for participation by the residents of the surrounding community.

## B. DESCRIPTION AND STATUS OF PLAN

The PMC Plan describes itself as a restatement, rather than a resubmission of an earlier master plan prepared in 1970 and approved as a Planned Unit Development by the City Planning Commission in 1971. The PMC Plan can be best characterized as long-range, site-specific, physical facility oriented, and implicitly based on projections of the needs for these specific facilities. The uncertainties inherent in any plan are enhanced in the PMC Plan by the unsettled future direction of health care delivery in the United States.

A site plan showing the PMC Plan facilities is shown in Figure E-1 These facilities are shown in elevation in Figure E-2, page 207. The PMC Plan includes a 2-step, short range plan for constructing certain of these facilities at unspecified future dates. The initial step of this plan, and accordingly the first priority of the overall PMC Plan, is the construction of an Ambulatory Care Center (AC) on the site proposed for the MOB.

With one exception, the Plan remains substantively unchanged since submission in 1976. This change calls for replacing the AC with a medical office building. Although the Plan is ostensibly a 10-year plan, as a practical matter it represents the ultimate development of the PMC campus. Therefore, it is not likely to be realized within this time period.

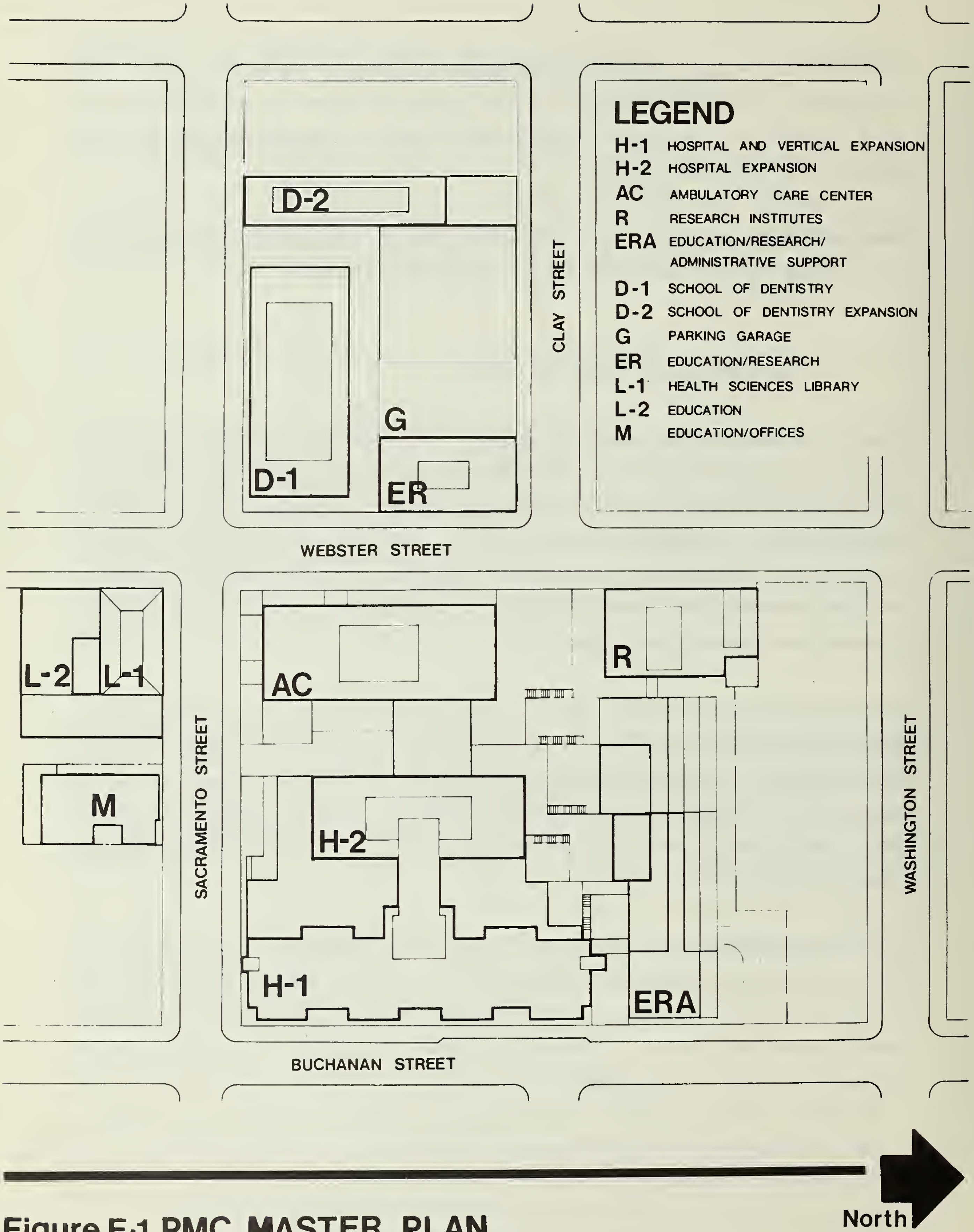

**Figure E-1 PMC MASTER PLAN**

Source: PMC Master Plan 1977-1987

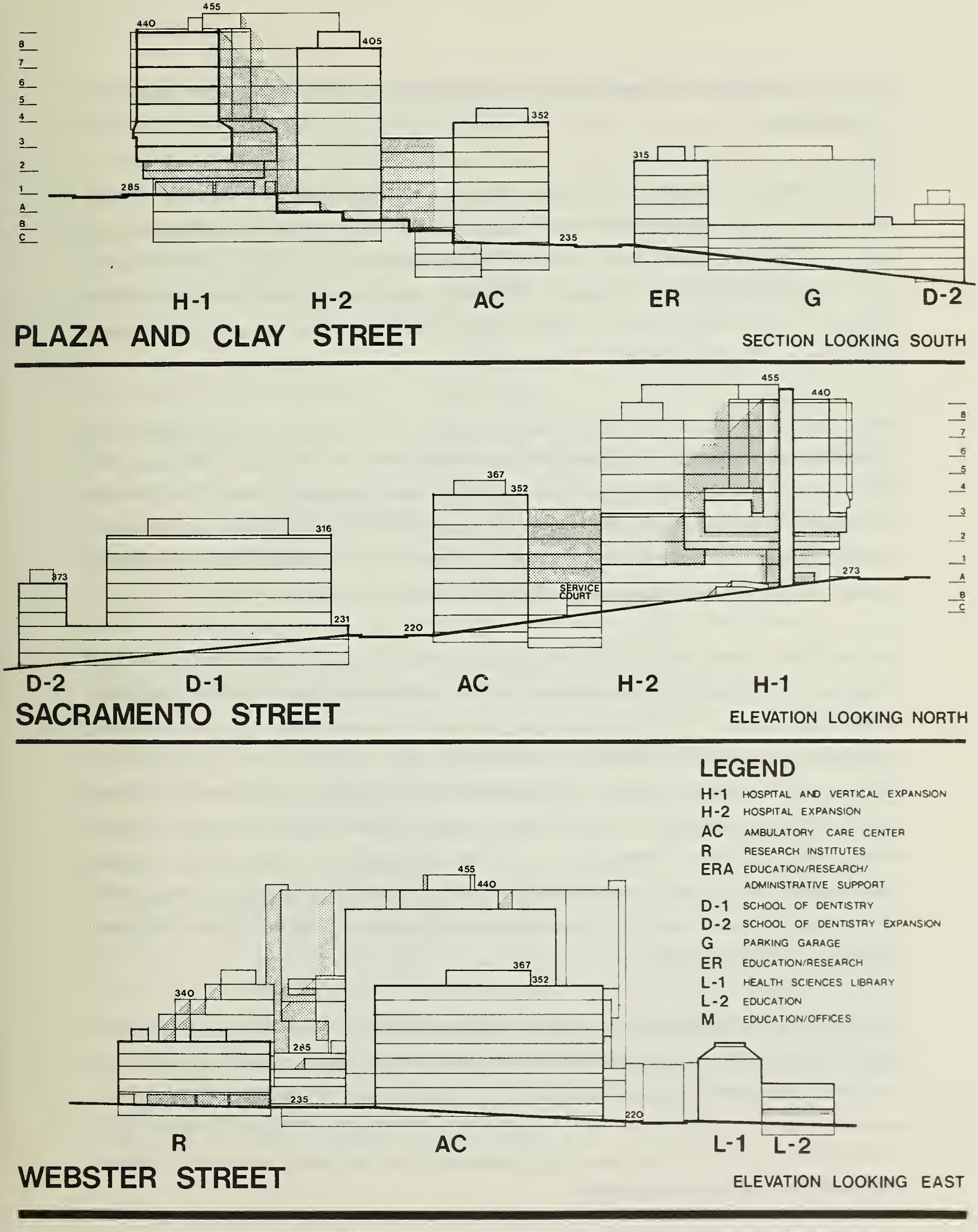

**Figure E-2 PMC MASTER PLAN BUILDING ELEVATIONS**

Source: PMC Master Plan 1977-1987

## C. RELATIONSHIP OF PMC PLAN TO WEST BAY HEALTH SYSTEMS AGENCY (WBHSA)

In 1974, Congress adopted Public Law 93-641, which provides for the establishment of Health Systems Agencies (HSAs) throughout the Nation, based on geography and population. There are 14 such HSAs in California; San Francisco is in HSA #4, the West Bay Health Systems Agency (WBHSA), along with Marin and San Mateo Counties. The HSA is mainly funded by and reports to the Secretary of Health, Education and Welfare (HEW).

The Governing Body is the policy-making group for the WBHSA, and members are proportionately selected according to population from the 3 constituent counties. Each county is separately organized under a sub-area Advisory Council (SAC) which is advisory to the Governing Body. Public Law 93-641 mandates that consumers be in the majority on the Governing Body and the SAC's. Ethnic origin, place of residence, age, sex and income are additional selection criteria.

The WBHSA is the regional review agency for the California Certificate of Need Program; it reviews applications and makes recommendations to the California State Department of Health, based upon its Health Systems Plan, as to the need and desirability of health institutions' proposals for construction, modernization, increases in capacity, capital expenditures over $173,550, and other specified health services expansions. The WBHSA also reviews proposed uses of Federal funds and, in San Francisco, by City Ordinance, reviews and makes recommendations to the San Francisco Planning Commission on applications from health institutions needing Conditional Use permits and revisions of their institutional master plans.

WBHSA now has an approved Health Systems Plan for 1978-1983. It contains specific health policy goals and objectives, analysis of current health services and problems, supportive data and detailed recommendations for change. By law, these recommendations reflect national guidelines and priorities issued by HEW, local demographics, and the comments of consumers and providers on specific health care services and perceived needs.

At present there are no direct, explicit relationship between the PMC Plan and the WBHSA Plan. The former predates the latter and is concerned with a relatively small portion of the total health care delivery system in 3 county HSA planning area. An indirect relationship exists in that Conditional Use permit applications for development pursuant to the PMC Plan will be submitted by the City Planning Commission to WBHSA for review and comment. Presumably WBHSA would comment on how any proposed development conforms to the WBHSA Plan.

## D. GENERALIZED IMPACTS OF PMC PLAN

This section is intended to present a generalized order of magnitude description of the impacts that would occur as a result of the implementation of the PMC Institutional Master Plan. The purpose of this analysis is to provide a context for consideration of MOB impacts as they relate to being a portion of the overall PMC Plan. It is important to note that the following analysis is not intended to serve as an EIR for the implementation of the PMC Plan or its constituent elements. Each development project proposed pursuant to the PMC Plan which may have a significant effect on the environment would require its own EIR.

The basis of this analysis is the PMC Plan, as previously described, and the assumptions contained herein are intended to reflect said PMC Plan. However, due to the complexity of the PMC Plan document, the assumptions of this section were distilled into Table E-1. This table presents the assumed net facility expansion increments (in gross square feet of floor area) that would result if the PMC Plan is implemented. These net facility expansion increments were calculated by subtracting the gross square feet of floor area of existing facility from the gross square feet of floor area of the proposed facilities which would replace them. It should be noted that the Ambulatory Care Center (AC) development element has been specifically excluded from these PMC Plan assumptions. The proposed MOB project and its description in other sections of this EIR is intended to represent and replace the PMC Plan's proposed AC building.

TABLE E-1. PMC PLAN - ASSUMED NET LAND USE INCREMENTS*

---

H-1, 2 Hospital

| | |
|---|---|
| H1 | 55,000 SF |
| H2 | 149,000 SF |

530 Beds
106 Parking Spaces

Education, Research and Administrative (ERA)

= 52,500 SF
94 Parking Spaces

School of Dentistry (D2)

= 46,00 SF
35 Parking Spaces

Education/Research Facility (ER)

= 68,000 SF
51 Spaces + 85 Cars Removed From Garage

Expansion of Health Sciences Library Site

= 30,00 SF
23 Parking Spaces

*The Ambulatory Care Center (AC) development element has been deleted. This information was described in detail as the MOB throughout this EIR.

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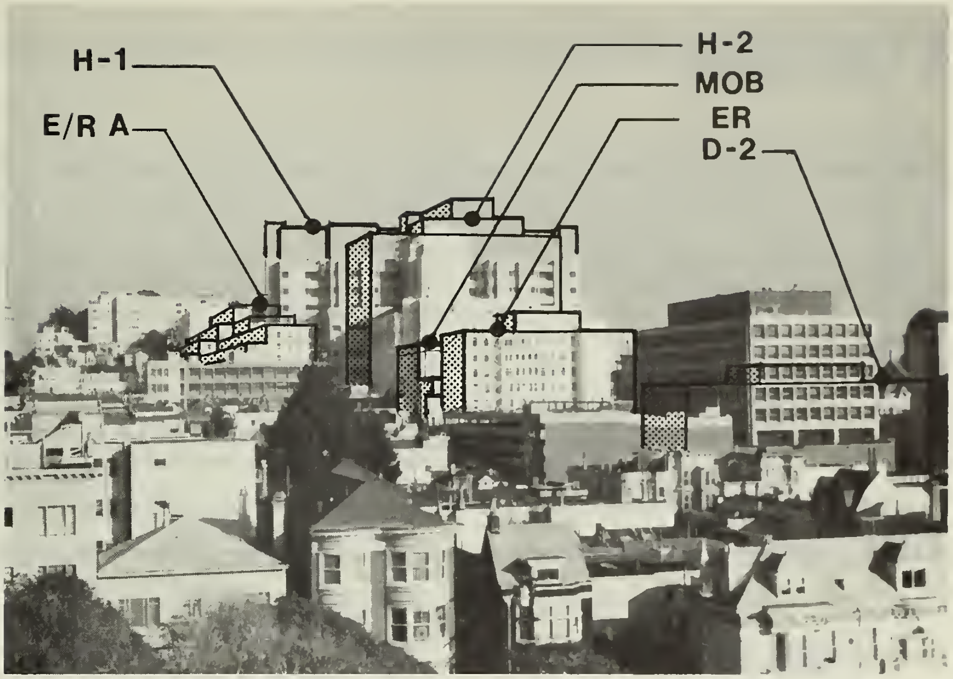
## 1. Visual Impacts

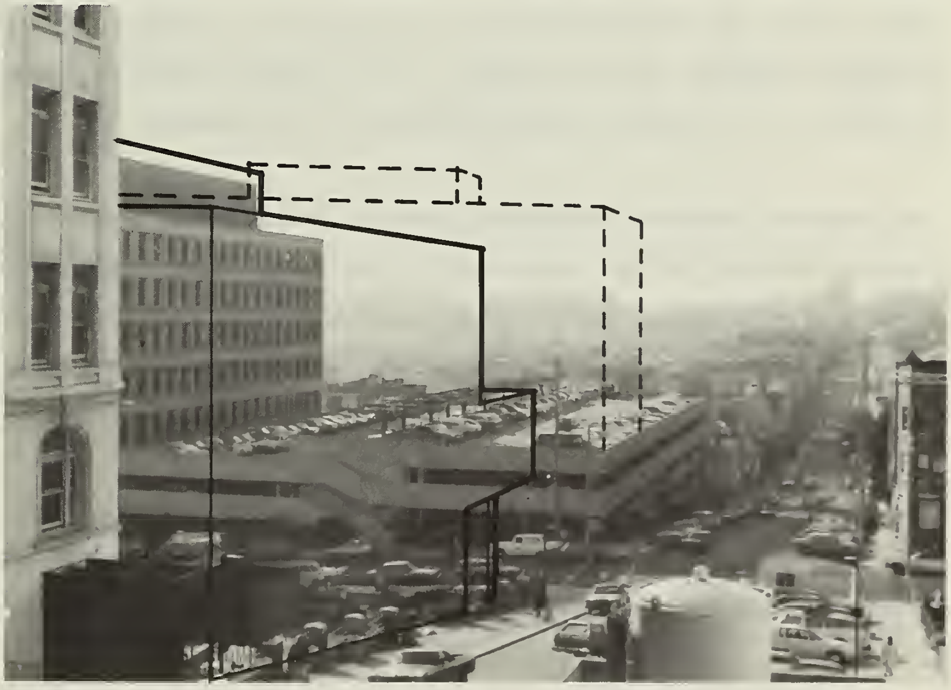
Implementation of the PMC Plan would increase the visual dominance of PMC, as shown in Figure E-3. This dominance would be evident both in distant views to the site and in close-in views from the surrounding area. The only major view which would be impacted by PMC Plan implementation is the view from Burns Memorial Court to the west down Clay Street, as shown in Figure E-3C.

## 2. Transportation Impacts

Implementation of the PMC Plan would result in the generation of 5,700 2-way daily vehicle trips, an increase of 10.6% over existing conditions. Approximately 400 additional parking spaces would be required. A detailed description of these analyses is contained in Appendix A, Transportation, page 126.



**A** BLACK OUTLINES INDICATE STRUCTURES SHOWN IN LONG RANGE PMC MASTER PLAN



**C** BLACK OUTLINE REPRESENTS MOB
DASHED OUTLINE REPRESENTS "ER"

**Figure E·3 MEDICAL CENTER PHOTOS**
FOR PHOTO LOCATIONS SEE PAGE 61

### 3. Noise Impacts

The impacts of implementing the PMC Plan would be much the same as the impacts of implementing the proposed MOB, that is, any demolition of existing structures or construction of new buildings would have some temporary noise impacts and there would be a possibility of increased mechanical equipment noise levels. The potential of increased noise levels in the area due to increased traffic was investigated in more detail based on the percent increases in average daily traffic associated with the PMC Plan. The greatest potential increase in noise levels would occur on Webster Street at California and would be on the order of 3 dBA. A 3 dBA increase in environmental noise is just detectable to the human ear.

### 4. Climate Impacts

Implementation of the PMC Plan would alter the wind and shadow environment of the site by adding several new buildings. The addition of the Educational Research Building atop the existing parking garage at the Clay/Webster Streets intersection would, with the existing School of Dentistry building, effectively shelter the proposed medical office building. The wind effects of the MOB, described elsewhere in this report, would be reduced or eliminated.

The proposed hospital expansion, west of the existing hospital building, would be partially shelterd by the medical office building. This building would extend 52 feet above the medical office building; wind increases of 5 - 10% would be expected near its north side while the south side would be sheltered by the medical office building.

By intercepting some of the wind that currently affects the existing hospital building, the hospital expansion would reduce the pressure difference between the two ends of the existing breezeway, reducing winds there by an unknown amount.

### 5. Air Quality Impacts

The construction of the various elements of the PMC Master Plan would have temporary air quality impacts similar to those described for the medical office building. In addition, demolition of existing structures would also be a source of dust and particulates.

The impacts of implementation of the remaining elements of the Master Plan would be similar to those of the Medical Office Building. Increases in local carbon monoxide and regional emissions result from the additional traffic generation of the Center. The master plan would result in 5700 new daily trips, or 1.9 times that of the Medical Office Building. Increases in local CO and regional emissions would be approximately 1.9 times those described for the Medical Office Building.

## EXISTING FACILITIES DESCRIPTION OF STRUCTURES

**(refer to site plan of existing facilities, 1976) Page ___**

**Hospital** (H-1)
- 285,000 G.S.F.
- 311 beds
- 8 levels above Buchanan including two mezzanines

- Roof elevation, 404.5; Penthouse Roof, 418.5.
- Two levels and Mechanical level below Buchanan Street.
- Main Entrance at Buchanan and Clay Streets.
- Emergency Entrance on Sacramento, near Buchanan.
- Service Entrance on Webster at Clay.
- Accommodates Acute Teaching Hospital Functions.
- Parking Requirement: at 1 car for 5 beds = 62 cars.

**Stanford Building** (to be placed in Long Range Plan)
- 96,000 G.S.F.
- 8 levels, North Wing.
- 6-7 levels, South Wing.
- Roof Elevation, North Wing, 353; Penthouse Roof, 364.
- Accommodates Ambulatory Care functions and Doctors' Offices.
    - Some Space Unfinished.
- Entries from Sacramento Street and Webster Street via Clay.
- Access between level 3 of Stanford Building and level 1 of Hospital.
- Parking Requirement: 72,000 net S.F. at 1 car/500 average = 144 cars.

**Research Institute** (R)
- 63,200 G.S.F.
- 5 levels including entrance lobbies and parking at first floor.
- Roof elevation, 295; Penthouse Roof, 307.
- Accommodates Institutes of Medical Sciences:
    - Heart Research Institute
    - Institute of Neurological Sciences
    - Smith-Kettlewell Institute of Visual Sciences
- Access from Webster Street.
- Parking for 19 cars.
- Parking Requirement: 63,200 net S.F. — 25% mechanical and general circulation. 47,400 net S.F. at 1 car/1000 = 47 cars.

**Annex** (to be replaced in Long Range Plan)
61,200 G.S.F.
8 levels
Roof elevation, 340; Penthouse Roof, 350.
Accommodates:
Doctors' Offices
Garden Sullivan Rehabilitation Center
Institutes of Medical Sciences Administration
Learning Disabilities Center
Lions Eye Clinic
Multiple Risk Factor Intervention Trial (MRFIT)
PMC Administrative Departments
San Francisco Hearing and Speech Center
School of Medical Sciences
Access from Webster at Clay Street.
Surface parking for 15 cars.
Parking Requirement: 45,900 net S.F. at 1 car/500 = 92 cars.

**Stern Building** (to be replaced in Long Range Plan)
11,300 G.S.F.
3 levels
Roof Elevation, 303; Penthouse Roof, 313.
Accommodates research and administrative functions.
Access from Webster and Buchanan via internal site circulation.
Parking Requirement: 8,475 net S.F. at 1 car/1000 = 8 cars.

**U.O.P. School of Dentistry** (D-1)
162,000 G.S.F.
6 levels above plaza.
3 lower levels including parking.
Roof elevation, 315; Penthouse Roof, 336.
Accommodates teaching functions.
Parking within building for 91 cars.
Surface parking for 54 cars.
Total provided: 145.
Parking Requirement:
162,000 — 25% for mechanical and general circulation = 122,400 net S.F.
92,000 net S.F. (education) at 1 car/1000 = 92 cars
30,000 net S.F. (clinic) at 1 car/500 = 60 cars
TOTAL = 152 cars

**Parking Garage** (G)
Parking for 395 cars.
4 levels plus roof.
Parapet Elevation, Clay Street 267'3"
Access from Clay Street.

**Victorian House Thrift Shop** (to be replaced by Long Range Plan)
6,200 G.S.F.
4 levels.
Accommodates PMC Auxiliary Shop.
Access from Webster Street.
Parking Requirement: 5 cars.

**Health Sciences Library** (L-1)
27,000 G.S.F.
4 levels plus basement. Intermediate stack levels.
Roof Elevation: 292.5.
Access from Sacramento Street.
Parking Requirement: Allow 5 cars for employees.
Other users are located elsewhere in the center.

**Mental Health Center** (M)
27,000 G.S.F.
3 levels.
Accommodates 30 inpatients plus outpatient facilities.
Access from Sacramento Street.
Parking for 12 cars.
Parking Requirement: 1 car/5 beds = 6 cars
plus 8,000 net S.F. at 1 car/500 = 10 cars
TOTAL = 16 cars

The area to the west of the main site at Sacramento and Webster has remained undeveloped since demolition of the Cooper and Lane Buildings and Lane Hall.

## EXISTING FACILITIES SUMMARY

| | Facility | G.S.F. | Parking Required | Parking Provided |
|---|---|---|---|---|
| H-1 | Hospital | 285,000 | 62 | — |
| | *Stanford | 96,000 | 144 | — |
| R | Research | 63,200 | 47 | 19 |
| | *Annex | 61,200 | 92 | 19 |
| | *Stern | 11,300 | 8 | — |
| D-1 | School of Dentistry | 142,200 | 152 | 145 |
| G | Parking Garage | N/A | — | 395 |
| L-1 | Health Sciences Library | 27,000 | 5 | — |
| M | Mental Health Center | 27,000 | 16 | 12 |
| | Thrift Shop | 6,200 | 5 | — |
| | | 719,100 | 531 | 590 |

*Buildings to be replaced during long range development.

The above summary does not include the 29-car surface parking lot on Buchanan Street.

## LONG RANGE DEVELOPMENT — 10 Year Plan

### Facilities Description

Note: Elements R, D-1, and L-1 remain as described under "Existing Facilities"

### Hospital (H-1)

Vertical Expansion, 2 floors, levels 7 and 8.
Penthouse expansion
New area 55,000 G.S.F.
Total area: 340,000 G.S.F.
Roof elevation, 440'-0". Penthouse Roof, 445'-0".

### Hospital (H-2)

To accommodate inpatient facilities plus expansion of diagnostic treatment areas, and support space.
Horizontal expansion through level 7.
10 levels plus 2 mezzanines.
Total area: 245,000 G.S.F.

### H-1 plus H-2

Bed capacity of H-1 and H-2:

| | |
|---|---|
| 500 | acute beds |
| 30 | psychiatric beds |
| 530 | total beds |

Total area, H-1 and H-2: 585,000 G.S.F.
1,104 square feet per bed.
Parking requirement: 530 beds at 1 car per 5 beds = 106 cars

### Ambulatory Care Center (AC)

To accommodate doctors' offices and clinic functions including outpatient rehabilitation, all in ambulatory care setting.
Functions presently in Stanford Building will be relocated in this building.
Total area: 165,000 G.S.F.
plus 28,000 future G.S.F. at link to H-2
8 levels above 2½ parking levels for 200 cars.
First floor elevation approximately 238.
Roof Elevation, 352; Penthouse, 367.

Linked to Hospital at all levels through level 3 of hospital. Main circulation is at level A, service at level B.

Pedestrian access is provided at the corner of Webster and Sacramento and at Webster at Clay via Clay Street landscaped plaza.

Vehicular access to parking (including egress) from Webster and Sacramento.

Parking Requirement including link:

193,000—25% mechanical and general circulation = 144,700 net S.F.
125,000 net S.F. doctors' offices at 1 car/300 = 417 cars
20,000 net S.F. clinics at 1 car/500 = 40 cars
Total = 457 cars

## Education, Research and Administrative Support (ERA)

Total area: 125,000 G.S.F.

5 functional levels with lower levels beginning 15'-0" from North property line at Annex, and stepped back to maintain a sloping profile to the North.

Lower floor will link with level A of Hospital.

Two to four parking levels below to accommodate a total of 270 cars. This parking will be linked below Clay Street plaza with AC parking. Access only will be provided at Buchanan Street.

Roof elevation varies. Maximum, 355; with Penthouse roof at approximately 370.

Parking Requirement:

125,000—25% mechanical and general circulation = 83,000 net S.F.
93,750 net S.F. at 1 car/1000 = 94 cars.

## School of Dentistry Expansion (D-2)

To accommodate patient care and teaching functions.

Total area: 46,000 G.S.F.

Parking levels below.

Parking Requirement:

46,000—25% mechanical and general circulation = 34,500 net S.F.
34,500 net S.F. at 1 car/1000 = 35 cars.

## Education/Research Facility (ER)

Total area: 68,000 G.S.F.

Requires reduction of 85 cars in Parking Garage.

Parking Requirement:

67,500—25% mechanical and general circulation = 51,000 net S.F.
51,000 net S.F. at 1 car/1000 = 51 cars.

**Expansion on Health Sciences Library Site**

To accommodate educational functions including continuing education and relocated Thrift Shop.

Total area: 30,000 G.S.F. approximately

Within 40'-0" height limit

Parking Requirement:

30,000—25% mechanical and general circulation = 22,500 net S.F.

22,500 net S.F. at 1 car/1000 = 23 cars.

**Education Offices**

No change in building configuration

Total area: 27,000 G.S.F.

Parking for 10 cars provided.

Parking Requirement:

27,000—25% mechanical and general circulation = 20,250 net S.F.

20,250 net S.F. at 1 car/1000 = 20 cars.

# LONG RANGE DEVELOPMENT SUMMARY

| | Facility | G.S.F. | Parking | |
|---|---|---|---|---|
| | | | Required | Provided |
| H-1 | Hospital and Vertical Expansion | 340,000 | 106 | — |
| H-2 | Hospital Expansion | 245,000 | | |
| *AC | Ambulatory Care Center | 193,000 | 457 | 200 |
| R | Research Institutes | 63,200 | 47 | 19 |
| ERA | Education/Research/ Administrative Support | 125,000 | 94 | 270 |
| D-1 | School of Dentistry | 162,000 | 152 | 91 |
| D-2 | School of Dentistry Expansion | 46,000 | 35 | 90 |
| G | Parking Garage | N/A | N/A | 310 |
| ER | Education/Research | 67,500 | 51 | — |
| L-1 | Health Sciences Library | 27,000 | 5 | — |
| L-2 | Education/Thrift Shop | 30,000 | 23 | — |
| M | Education/Offices | 27,000 | 20 | 12 |
| | **TOTAL** | 1,325,700 | 990 | 993 |

*includes parking below plaza.

## APPENDIX F: COMMUNITY CONCERNS

In order to solicit comments from the Pacific Heights Neighborhood concerning the potential environmental impacts of the proposed MOB, two meetings were held with a Citizens' Advisory Committee (hereinafter Committee). The formation and composition of this Committee are described in Chapter II.A.2, page 7.

At the first meeting, the Committee identified potential MOB impact areas and their specific concerns in each area. The second meeting was devoted to the presentation of EIR consultant findings or each of the impact areas identified during the first meeting. At the second meeting Committee members were also requested to suggest measures to mitigate impacts which they deemed to be adverse.

In order to present the results of these two meetings in a complete and objective manner, this appendix uses the following format. For each potential impact area, specific Committee concerns are framed in the form of impact issues. Consultant findings on each impact issue are next presented, either by referencing relevant sections of the EIR text or by a separate discussion of findings. The discussion of findings is followed by a listing of mitigation measures suggested either by the Committee or the consultant. The status of mitigation measures, with respect to acceptance, consideration, or rejection by Pan-Med Ltd., is discussed in Chapter V. page 97. The subject matter order of the impact issues is that used by the consultant at the second meeting; this order does not necessarily reflect the priorities of the Committee.

### Residential Property Values and Rents

Issue: Would the MOB enhance residential property values and rents in surrounding area, cause them to decline or have a neutral impact?

Finding: Several San Francisco real estate firms which handle residential and rental property in the Pacific Heights neighborhood were contacted by telephone on this issue. At the suggestion of the Committee, a realtor who lives in the vicinity of PMC was also contracted.[1] All persons contacted were familiar with the site of the proposed MOB and the surrounding neighborhood. After being given a brief description of the proposed MOB, these persons were asked to comment on the above issue.

Based on their experiences with residential properties in the neighborhood since the construction of Presbyterian Hospital, there was general agreement among the realtors that construction of the MOB would not have a positive impact on residential property values, but opinions varied as to whether the MOB would have a neutral or negative impact. All of the realtors contacted noted that residential property values have already been negatively affected by the expansion of PMC, specifically the construction of the Presbyterian Hospital. Some realtors concluded that in this context, construction of the MOB would have a neutral impact, but the majority believed that a negative impact would be experienced.

The impact of MOB operation on rents is discussed at Chapter IV, Housing, page 61.

Mitigation: The Committee suggested that the MOB not be constructed. This is the no project alternative which is discussed in Chapter VII, Alternatives, page 108.

## Litter

Issue: Would neighborhood litter be increased during construction and operation of the MOB?

Finding: Litter as defined here includes dust and suspended particulates, which are discussed at Chapter IV, Air Quality Impacts, page 86. Litter in the form of debris and discarded waste materials would be generated by construction of the MOB. Sources include wrappings and packages of construction materials, scraps and waste construction materials, and litter generated by construction workers. The operation of the MOB may increase neighborhood litter. Potential sources include food packages, newspapers, waste smoking materials, and other miscellaneous debris discarded by MOB staff and patients.

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[1] Victor Ceda, Coldwell Banker, San Francisco, telephone conversation of 1 May 1979.

Mitigation: The consultant recommends several dust and suspended particulate control measures which could be employed during MOB construction (see Chapter IV, Air Quality Impacts, page 86). The Committee suggests that these measures be incorporated into the construction contract and that a joint neighborhood-Pan-Med Ltd. committee be established to monitor compliance with these measures.

Finding: In recent years all public litter receptacles have been removed from San Francisco's streets. The major reason for this policy is that these receptacles tended to collect household garbage instead of litter. San Franciscans for a Cleaner City (SFCC), a quasi-governmental organization funded by the state under a program for decreasing litter in California cities, operates a program which places stone aggregate covered trash receptables throughout the City. Experience with this type of litter receptacle in other cities and San Francisco has demonstrated that it is much less likely to collect household garbage. Upon application to SFCC and approval by this agency, an institution, business organization, etc. may purchase stone aggregate receptacles for installation on streets located around their facilities. Trash is removed from these receptacles by Sunset Scavengers under a contract with the City. On 20 April 1979, four stone aggregate receptacles, purchased by PMC, were installed in the neighborhood.

Mitigation: The consultant recommends that Pan-Med purchase an appropriate number of the above receptacles, have them installed by SFCC in the vicinity of the MOB, and implement an employee/patient education program to encourage their use.

## Noise

Issue: What would be the noise impacts of the MOB, including ambulance, taxi, and mechanical equipment noise, particularly during early morning, early evening, and nighttime hours?

Findings: See Chapter IV, Noise Impacts, page 82.

Mitigations: The Committee agrees with the noise control measures proposed by the consultant, (see Chapter V, Noise Mitigation, page 100) but again is concerned with enforcement. The consultant recommends that Pan-Med designate an individual to respond to noise complaints both during the construction and operation phase of the MOB, and that MOB maintenance operations which generate exterior noise not be conducted during early evening and night hours.

## Residential Security - MOB Construction

Issue: How would the construction of the MOB impact on the safety and security of neighborhood children?

Finding: During MOB excavation and construction operations, the site may attract children trespassers who live in the surrounding neighborhood.

Mitigation: The Committee suggests that Pan-Med employ a security patrolman to watch the construction site during nonworking hours.

## Residential Security - MOB Operation

Issue: The proposed MOB would be closed in the evenings and on weekends. How would the presence of an uninhabited structure impact on the safety and security of the residents of the surrounding area?

Findings: See Chapter IV, Community Services Impacts, page 91 for a discussion of the impact which the operation of the MOB would have on San Francisco Police and Fire Service to the neighborhood. Building security for the MOB would be provided by the PMC security force.

Mitigation: The Committee suggests that the landscaping surrounding the MOB and the plaza located on the east side of the building be lighted with low level lights, and that a fence be located between the plaza and the Sacramento Street sidewalk.

## Driveway Access

Issue: Would the speed and volume of traffic increase sufficiently to impede safe ingress and egress to and from residential driveways?

Finding: See Chapter IV, Transportation Impacts, page 70.

Mitigation: The Committee suggests that stop signs be installed at the intersections of Webster with Washington and Jackson Streets to slow down traffic travelling on Webster Street.

## Medical Technology Health Hazards

Issues: Would the MOB occupants utilize any medical technologies which would pose a health or safety hazard to the neighborhood?

Finding: The MOB would include a x-ray facility, laboratory, and pharmacy. All city, state, and federal regulations governing their operation would be followed.

Mitigation: None suggested.

## Parking During MOB Construction

Issue: How would the parking requirements of MOB construction workers and the removal during construction of on-street parking spaces impact on the availability of on- and off-street parking on the neighborhood?

Finding: It is estimated that approximately 89 construction workers per day would be on-site during MOB construction. It is customary for construction workers who drive to the work site to find their own parking wherever available. No on-street parking would be removed during MOB construction.

Mitigation: The consultant recommends that free remote-site parking served by the shuttle bus be provided for MOB construction workers.

## Parking During MOB Operation

Issue: How would the parking demand generated by the MOB staff and patients and the parking supply which would be provided by the MOB relate to the existing on- and off-street parking demand/supply in the neighborhood?

Finding: See Chapter IV, Transportation Impacts, page 70.

Mitigation: The Committee suggests that parking in excess of the demand estimated for the MOB be provided. The consultant recommends that the MOB garage be made available during non-operation hours (approximately 7 p.m. to 8 a.m.) to residents of the neighborhood and that parking garage security be provided during the early evening (7-10 p.m.) and early morning (5-8 a.m.) hours. It is important to note that this latter measure would not mitigate any MOB parking impacts, but it would mitigate the existing parking situation.

## Fillmore Street Commercial Parking

Issue: How would the parking demand/supply generated by the MOB relate to the parking demand/supply generated by the Fillmore Street commercial and shopping district, both as it presently exists and as it is likely to change over time?

Finding: The MOB would provide parking to meet only the parking demand it would generate, and it would use a parking charge validation system to discourage use of the MOB garage by persons who are neither patients nor staff of the MOB. Despite this differential rate structure, it is likely that some unknown quantity of MOB parking would be used by non-MOB related persons who are willing to pay the unvalidated parking charge. Pan-Med intends to monitor the garage for this type of use and adjust the parking rates as necessary to prevent it.

It is presently planned that the MOB parking garage would be physically closed from approximately 6 p.m. to 7 a.m. and would thus be unavailable for use by patrons of the Fillmore Street shopping, and commerical district during this time.

Mitigation: None suggested.

## Parking Space Removal

Issue: How many of the present on-street parking spaces would the MOB remove for auto entrance/exit, white passenger zone, yellow loading zone, taxi stand and the like? How would these restrictions relate to the present and future demand for parking? What would be the impacts of leaving the remaining on-street spaces alongside the site unrestricted, or with a time limitation, or with meters?

Finding: Two existing, unmetered parking spaces would be removed to provide access to the MOB parking garage. Passenger drop-off, taxi stands, and loading/unloading operations would occur in the Clay Street vacation. The loss of 2 spaces from the neighborhood parking supply would increase demand, both present and future, for the remaining spaces. The parking spaces alongside the proposed MOB site are presently unrestricted, allowing neighborhood residents, PMC employees and patients, and patrons of the Fillmore Street commercial and shopping district to park there on a long-term, first come, first served basis. Converting these spaces to metered or time-limited spaces would tend to favor short-term parkers such as out-patients and shoppers.

Mitigation: None suggested.

### Remote-Site Parking

Issue: What would be the impacts, acceptance and use of the remote-site parking in place of some of the city-required on-site parking?

Finding: One of the parking alternatives explored by Pan-Med was the rental of remote-site parking which would be connected with the MOB via a shuttle bus system. Remote parking would be used by MOB staff. This alternative would to some degree reduce traffic, noise, and air pollution in the vicinity of the MOB by reducing the number of vehicles travelling to the site.

Although remote-site parking would mitigate some of the impacts of on-site parking, it would be essential to secure a long-term committment before remote parking could adequately substitute for on-site parking. A 20-year term would probably be the minimum acceptable period. Potential remote-sites which were investigated by Pan-Med indicated a willingness to commit only for periods of 2-5 years.

Mitigation: None suggested.

## Neighborhood Preferential Parking

Issue: If preferential parking is implemented in the neighborhood, how would it relate to the parking demand/supply generated by the MOB?

Finding: The MOB parking garage would have the capacity to accommodate all of the parking demand which has been estimated for the MOB staff and patients. This estimate assumes that none of these persons would use on-street parking.

Preferential parking has been approved by the Board of Supervisors for the Pacific Heights neighborhood bordered on the east by Van Ness Avenue, on the west by Presidio Avenue and on the north and south by Union and Bush Streets, respectively. All of the MOB study area, as shown in Figure 11, page 38, is included in the preferential parking area. Although preferential parking has been approved, it has not yet been implemented. The Department of Public Works cannot implement the preferential parking in this fiscal year unless supplemental funds are appropriated. If the supplemental appropriation is not approved, then the preferential parking will not be implemented until the next fiscal year, beginning July 1, 1980.[1]

Once preferential parking is implemented in the neighborhood, on-street parking availability should improve for the neighborhood residents. Residents will be given stickers for their cars, allowing them to park as long as they wish. All other cars will be ticketed if they are parked longer than 2 hours in any one location between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. It will no longer be possible for PMC employees to use on-street parking due to the 2 hours limit. They will have to use off-street parking facilities or ride public transit as an alternative to driving.

Mitigation: If preferential parking is implemented, the consultant recommends that Pan-Med revise its parking rate structure to discourage use of its garage by non-MOB staff.

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[1] James Chia, Traffic Engineer, Department of Public Works, San Francisco, telephone conversation of 2 May 1979.

## MOB Parking Garage

Issue: How would the usage of the MOB parking garage, i.e. location of vehicular entry and exit points and timing of peak hours of ingress and egress, impact on the flow of street traffic in the neighborhood?

Finding: The peak periods for MOB employee usage of the MOB parking garage would be in the morning between 8-9 a.m. and in the afternoon between 4:30-5:30 p.m. The impact of this employee increase in vehicle traffic is discussed at Chapter VI, Transportation Impacts, page 59. Peak MOB patient usage of the MOB parking garage would occur between 2-4 p.m., non-peak hours with respect to neighborhood traffic flow.

Mitigation: The consultant suggests that Pan-Med implement measures which would reduce employee vehicle use, and thus reduce MOB related traffic without affecting the existing demand for on-street parking in the neighborhood. While reducing the amount of employee parking available in the MOB garage would discourage some employees from driving to work, others would continue to drive to work and would compete for existing on-street spaces. Measures which would not have this impact include subsidizing employee car pool parking and making free Muni transit passes available to employees.

## MOB Traffic

Issue: How would pedestrian and vehicular access to the MOB impact on existing pedestrian and vehicular traffic patterns, especially with regard to the placement of new traffic signals, stop/yield signs, and cross-walks?

Finding: Vehicle access to the MOB parking garage would be on the east side of Webster Street approximately midway between Clay and Sacramento Streets. Vehicular access to the MOB for dropping off passengers would be at the intersection of Clay and Webster Streets, specifically in the Clay Street vacation. Pedestrian access to the MOB would be adjacent to the passenger drop-off point.

Existing pedestrian volumes in the vicinity of the proposed MOB site were observed to be low and quantitative measurements did not appear to be warranted. It is estimated that approximately 210 pedestrian trips would be generated by the MOB.

Presently, existing plus MOB generated pedestrians who would utilize the east side of Webster Street between Washington and Sacramento Streets would be affected by vehicles using the MOB garage and the passenger drop-off zone. Existing plus MOB generated pedestrians crossing Webster Street at the Clay, Sacramento, and California Street intersections would also be affected by the increase in vehicular traffic along this section of Webster Street (see Chapter VI, Transportation Impacts, page 63.)

Mitigation: The consultant recommends that the MOB garage entrance/exit be equipped with pedestrian warning signs and that this section of the sidewalk be painted or otherwise marked to alert drivers that it is used as a pedestrian cross-walk. The vehicle exit should be equipped with a speed bump or other device which would physically bring existing vehicles to a stop prior to entering the pedestrian cross-walk. The vehicle exit should also be equipped with an acoustical warning device which would warn pedestrians that a vehicle is exiting, yet would not be intrusive on the surrounding neighborhood.

The consultant recommends that the existing marked pedestrian cross-walk at the intersection of Clay and Webster Streets be supplemented with markers and warning signs to avoid conflicts between pedestrian traffic and vehicles dropping off passengers.

### MOB Service Vehicles

Issue: How would service vehicles for the MOB impact on the neighborhood?

Finding: MOB service vehicles would use the Clay Street vacation in the same manner as service vehicles which serve PMC. An estimate of the service vehicles which would be generated by the MOB is found at Table A–8, page 146

Mitigation: None suggested.

## MOB Patient Drop-Off/Pick-Up by Vehicle

Issue: How would patient drop-off and pick-up for the MOB impact on the neighborhood?

Finding: The phenomena described in this issue would increase traffic in the neighborhood. See discussion at Chapter IV, Transportation Impacts, page 70.

Mitigation: None suggested.

## MOB Transit Access

Issue: How would pedestrian access to the MOB relate to existing public transit stops?

Finding: See Figure 11, page 38.

Mitigation: None suggested.

## MOB Impact on Transit

Issue: What would be the impacts of MOB users' public transit needs on public transit loads, capacities and frequencies? If the announced Muni plan is implemented, what would be the impacts of MOB users' public transit needs?

Finding: See discussion at Chapter IV, Transportation Impacts, page 70.

Mitigation: None suggested.

## MOB Patients

Issue: What would be the impacts on the neighborhood of patients' relatives and friends with waiting time on their hands?

Finding: Given the close proximity of the Fillmore Street to the MOB, some relatives of patients would likely spend their waiting time shopping or patronizing an eating or drinking establishment. Others would pass the time on walking tours of the neighborhood. The majority of these persons would probably wait in the MOB. All of these activities would increase pedestrian traffic in the neighborhood.

Mitigation: The consultant suggests that the MOB lunchroom and outdoor plaza be made available for use by relatives or MOB patients.

## MOB Staff

Issue: What would be the impacts on the neighborhood of MOB staff during lunch hours and other time off?

Finding: The MOB would include a staff lunch room adjoining an outdoor plaza located on the east side of the building. The availability of these facilities would encourage most MOB staff to remain on the premises of the MOB during lunch and break periods. Others would choose to patronize similar facilities on Fillmore Street, while still others would spend their lunch hours and free periods elsewhere in the surrounding neighborhood. These latter activities would increase pedestrian traffic in the neighborhood.

Mitigation: None suggested.

## MOB Impact on Fillmore Street

Issue: What would be the impacts on Fillmore Street restaurants and bars of persons with business in the MOB?

Finding: It is anticipated that MOB staff and patients would patronize Fillmore Street restaurants and drinking establishments. This increased patronage may increase the commercial viability of this street, thereby to some degree encouraging similar new establishments to locate there.

Mitigation: None suggested.

## Neighborhood Character

Issue: How would the MOB affect the character and integrity of the surrounding residential neighborhood?

Finding: See Chapter IV, Neighborhood Character Impacts, page 60.

Mitigation: See generally Chapter V, Impact Mitigation, page 97.

## Neighborhood Visual Quality

Issue: How would the MOB impact on the existing visual quality of the surrounding neighborhood, including but not limited to the impact of the height, bulk and placement of the MOB on the existing scale of the neighborhood, the relationship of the architectural design of the MOB to surrounding structures, the placement of the MOB on its site in relation to sidewalk pedestrian traffic and the setbacks of surrounding structures, the impact of the height, bulk and placement of the MOB on existing views both to and from the surrounding neighborhood, and the relationship between MOB landscaping and the surrounding neighborhood?

Finding: See Chapter IV, Visual Character Impacts, page 61.

Mitigation: See Chapter V, Impact Mitigation, Visual Character.

## MOB Support Services

Issue: Would the MOB require support services, such as restaurants, newspaper racks, public telephones, pharmacies and banks, and how would such services affect the surrounding neighborhood?

Finding: The MOB would not include a restaurant, exterior newspaper racks, public telephones, or a bank. The MOB would include a pharmacy and a lunch room with vending machines. It is not anticipated that the MOB pharmacy would be patronized by the general public.

Mitigation: None suggested.

## Solar Access

Issue: Would the shadows cast by the proposed MOB impact on the solar access of surrounding structures, especially residence?

Finding: See Chapter IV, Visual Character Impacts, page 61.

Mitigation: None suggested.

## Radio/TV Reception

Issue: Would the proposed project inhibit reception of television and radio in neighboring residences?

Finding: The MOB would not transmit any radio or television signals. Its height would not interfere with the reception of radio or television signals.

Mitigation: None suggested.

## Residential Conversions to Medical Offices

Issue: Would construction of the MOB encourage, discourage or have no impact on a phenomenon which is occurring in the neighborhood and along Fillmore Street, i.e., the conversion of residences and commercial structures into medical and doctor's offices?

Finding: See Chapter IV, Land Use Impacts, page 57

Mitigation: None suggested.

## Fillmore Street Commercial Mix

Issue: How would the MOB change the Fillmore Street commercial mix?

Finding: The Fillmore Street commercial area adjacent to PMC is currently in a state of transition from a neighborhood service oriented district to an area providing goods and services to a city-wide and regional clientele. Because they would be in the neighborhood on a daily regular basis, MOB employees would to some degree use the Fillmore Street neighborhood oriented services, e.g. dry cleaners, grocery stories, variety stores, to meet their daily needs. MOB patients, who are not in the neighborhood on a daily basis, would tend not to use these same services, but would be more likely to patronize eating and drinking establishments, which would also receive some patronage from MOB employees.

Mitigation: None suggested.

## MOB Municipal Taxes

Issue: What would be the municipal tax impacts of the MOB?

Finding: See Chapter IV, Fiscal Impacts, page 90.

Mitigation: None suggested.

## Public Land Use Regulations

Issue: What permits or other title would the MOB require from the City of San Francisco and how would the MOB relate to the floor area ratio and height and bulk limits applicable to the proposed MOB site?

Finding: See Chapter IV, Land Use Regulations, page 57.

Mitigation: None suggested.

## Private Land Use Regulations

Issue: How would the MOB relate to any conditions specified in the deed granting the proposed MOB site to PMC?

Finding: Deed convenants, conditions, and restrictions are private land use regulations and are beyond the scope of an Environmental Impact Report.

## Health Care

Issue: How would the MOB relate to the health care needs of the larger San Francisco community, and how would the MOB relate to the West-Bay Health Systems Agency?

Finding: As noted under Public Land Use Regulations, any conditional use permit required by the MOB would be subject to review and comment by WBHSA. This agency would address the issue of how the MOB relates to the health care needs of San Francisco.